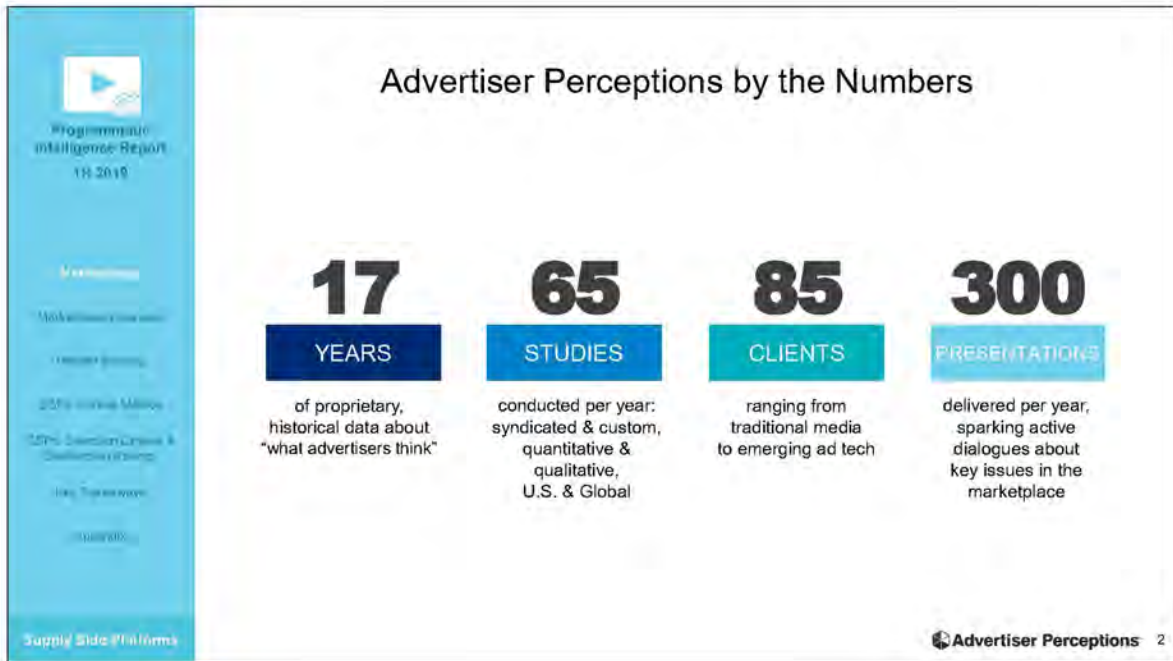



EXHIBIT 24







Programmatic Intelligence Report
1H 2019

Methodology

Marketplace Overview

Company Overview

SSPs: General Motors


SSPs: Selection Criteria & Satisfaction Rating

Key Takeaways

Appendix


Supply Side Platforms

Methodology



155
interviews
conducted


Sample: Digital sales and operations contacts from The Advertiser Perceptions Media Decision Maker Database and third-party databases as needed

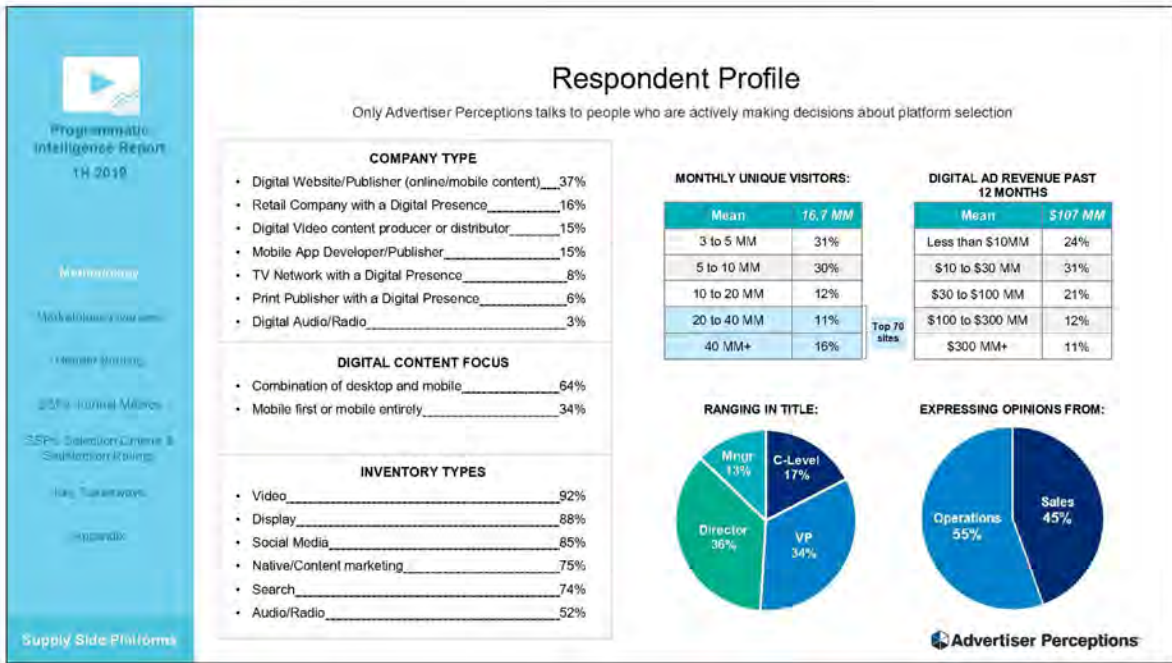


**Fielded
March
2019**

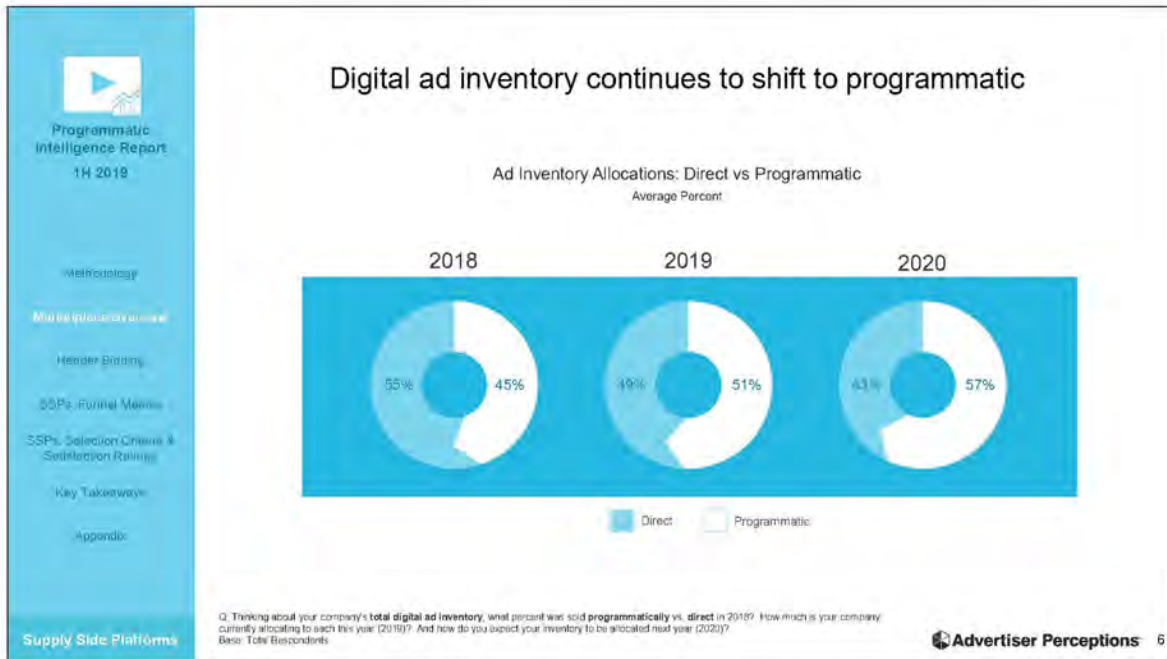
Qualification:

- Involved in display or video sales or operations/monetization
- 3M+ unique monthly visitors across all digital properties
- Sells inventory programmatically
- Uses an SSP

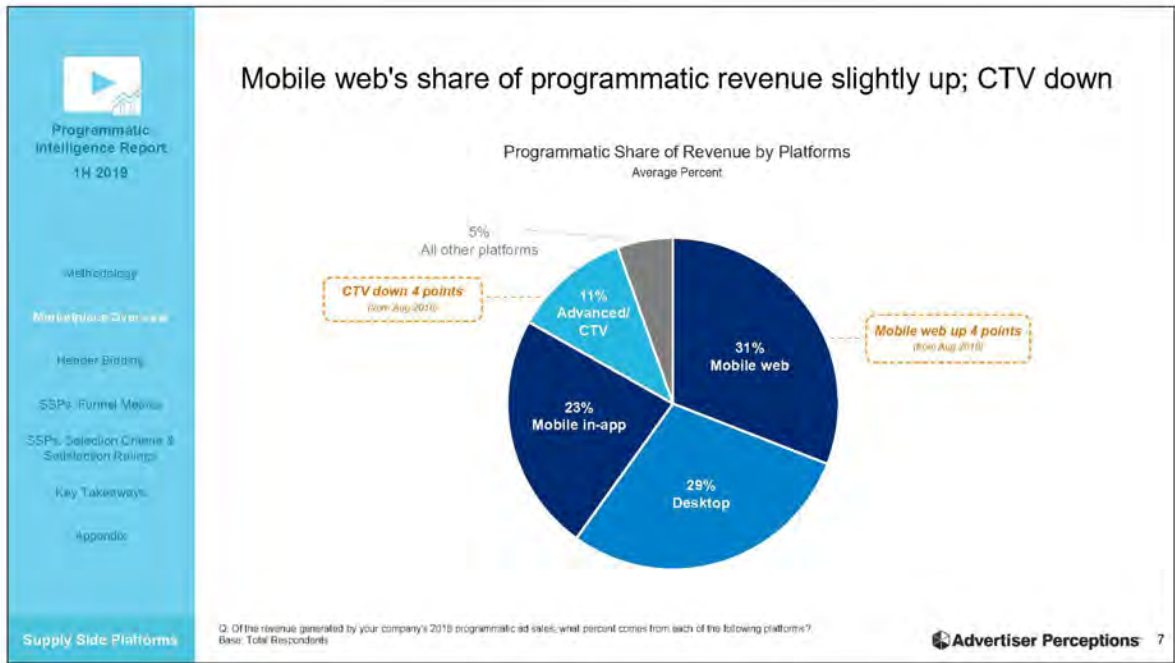




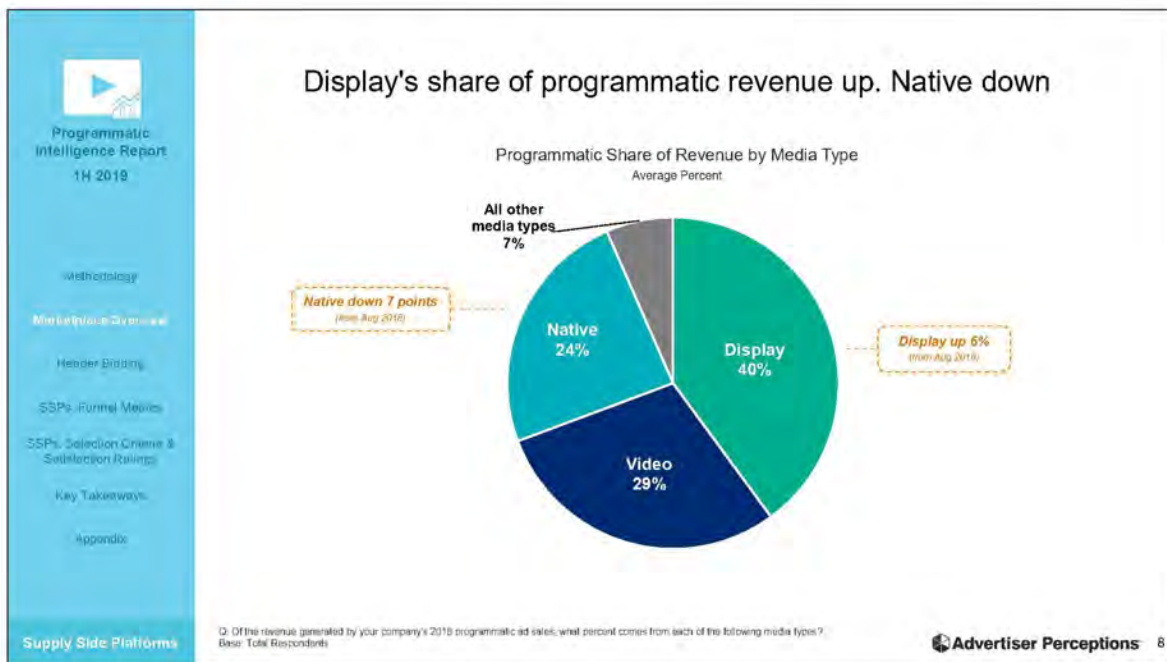




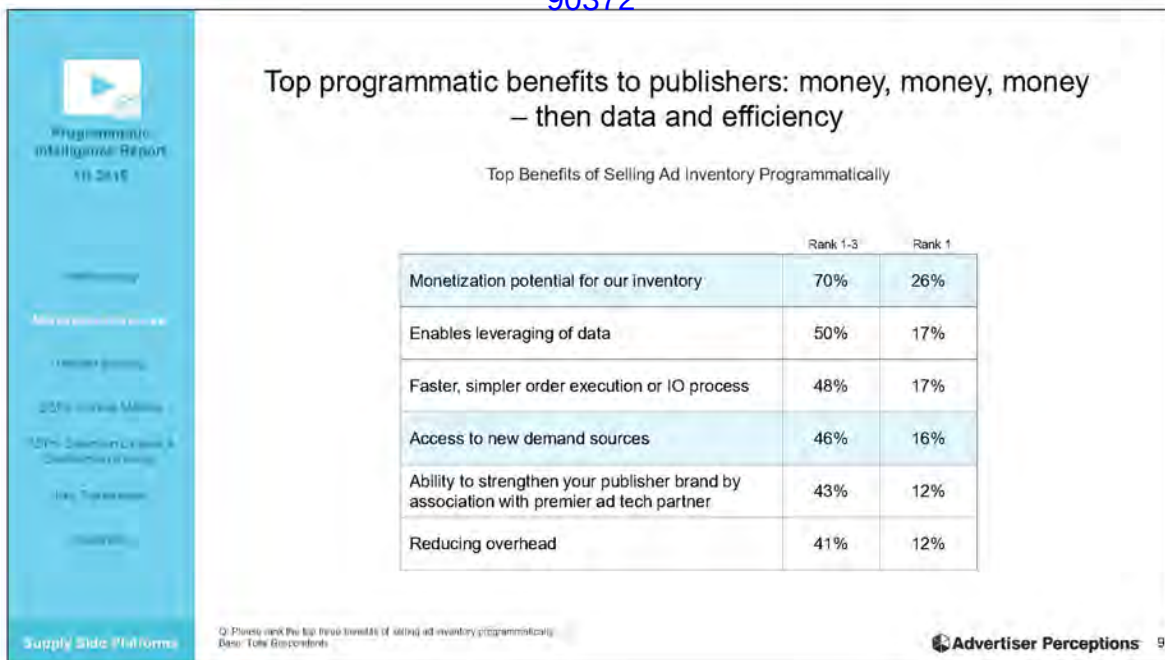
Q10a



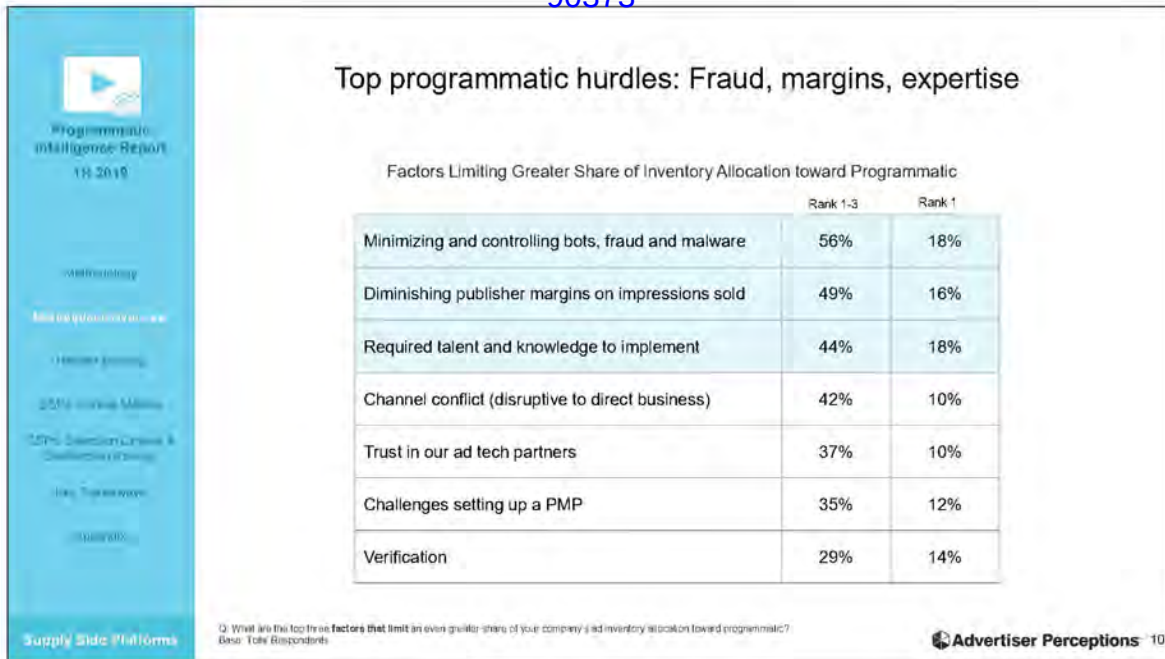
Q10b



Q10c

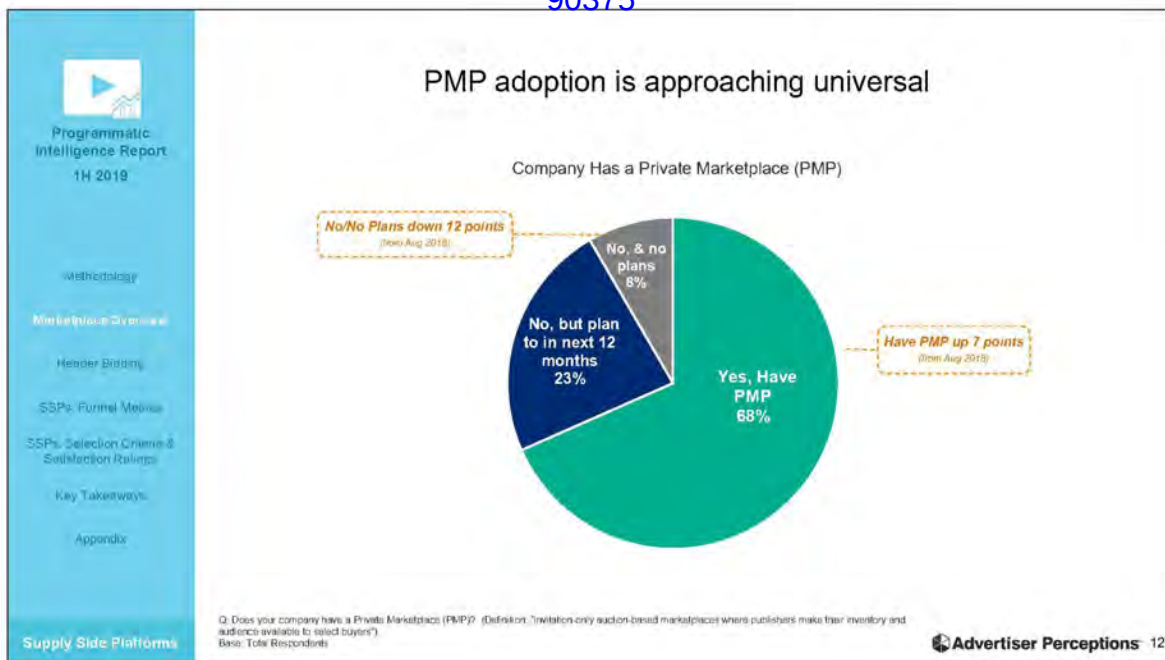


Q15a

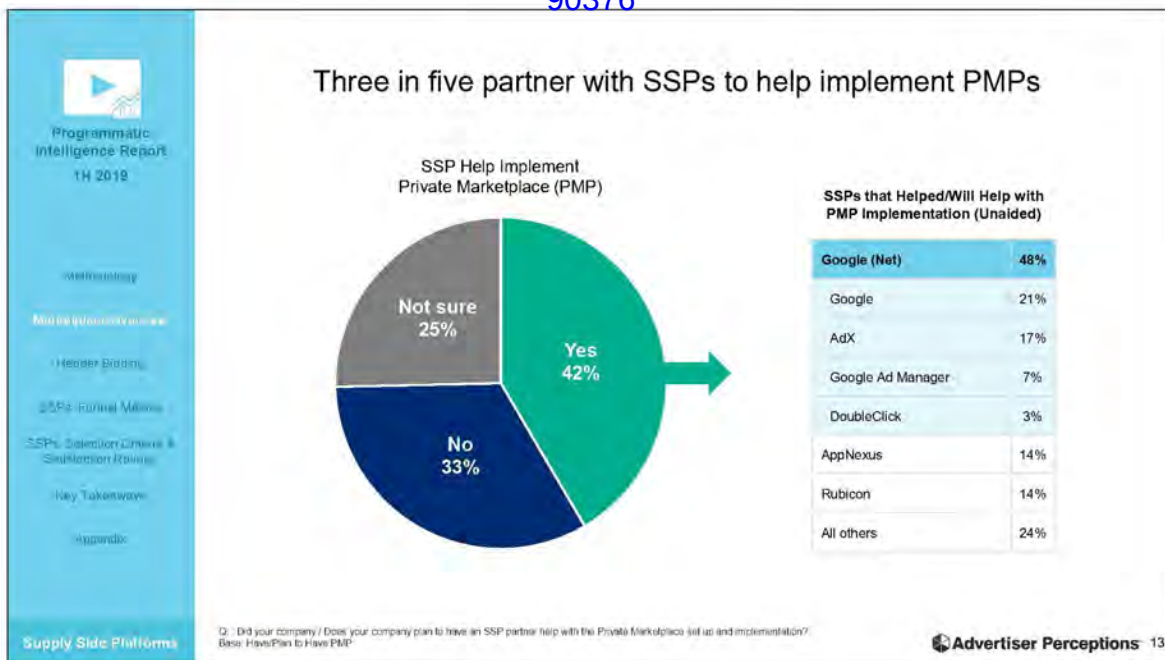


Q15b

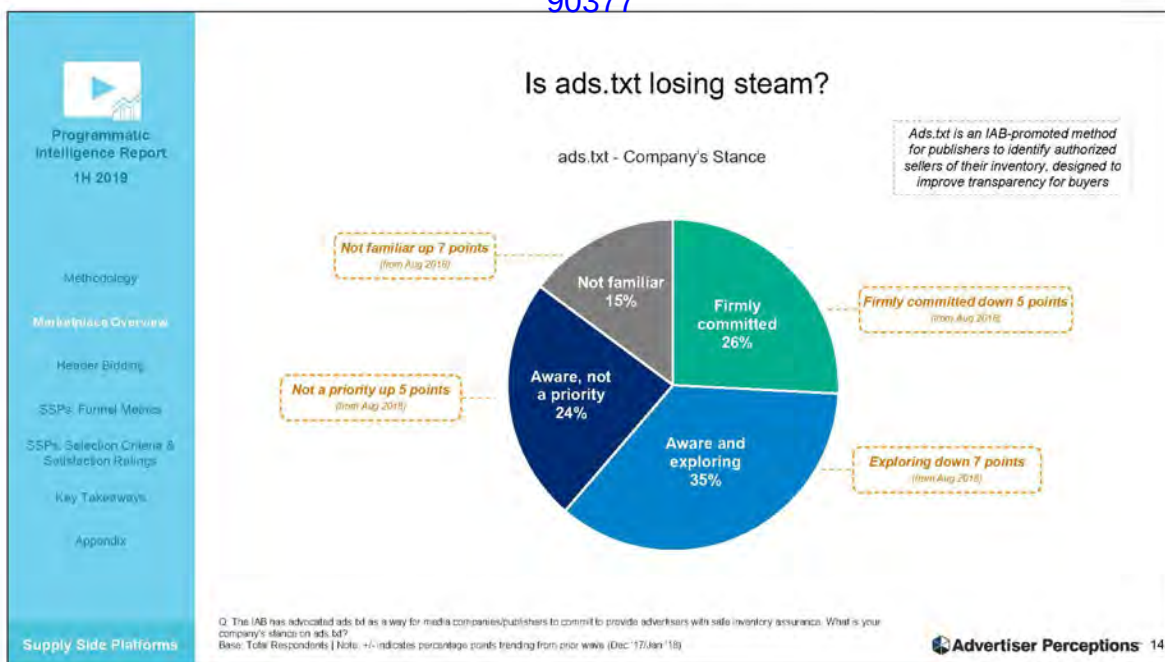
CONFIDENTIAL



Q16a



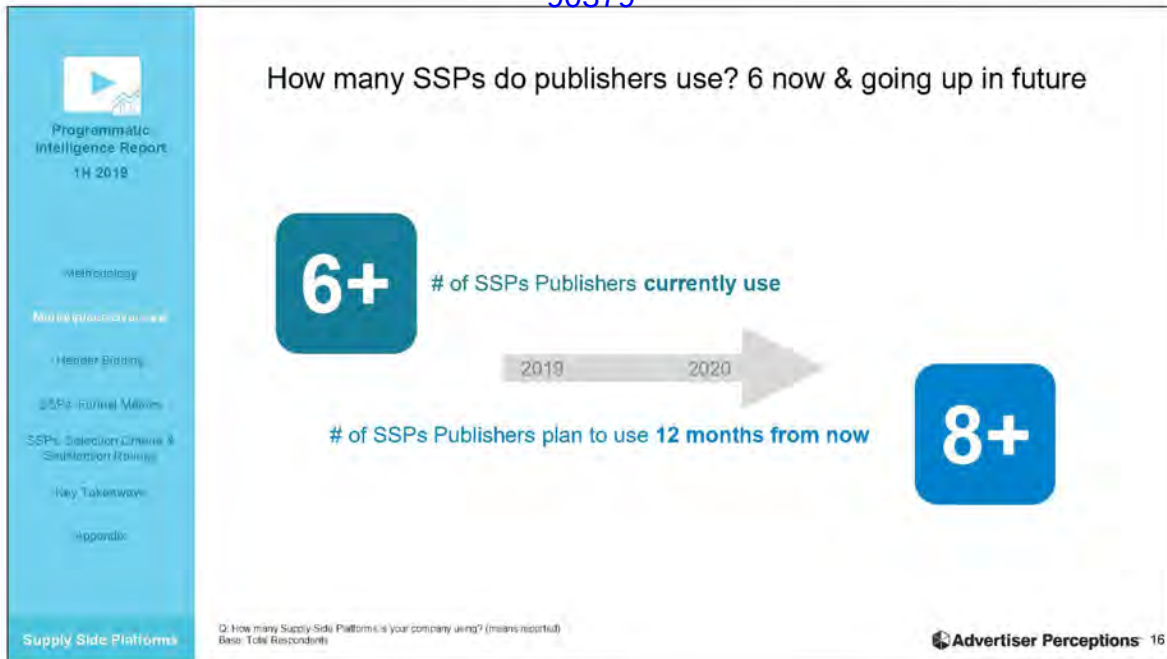
Q16b



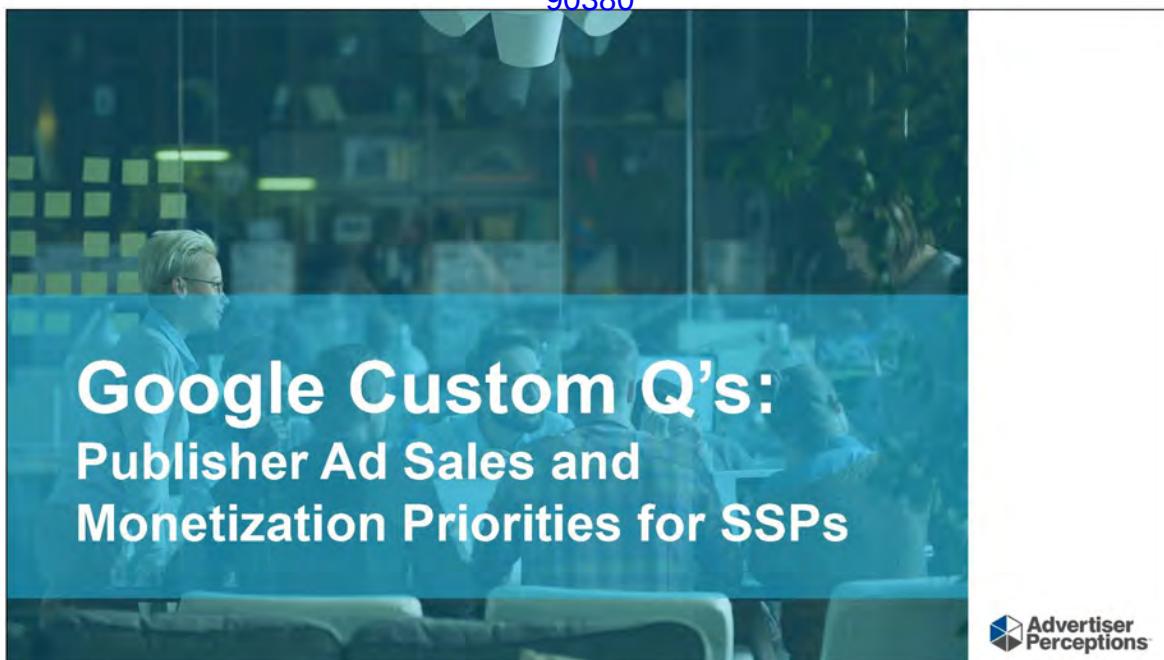
Q80

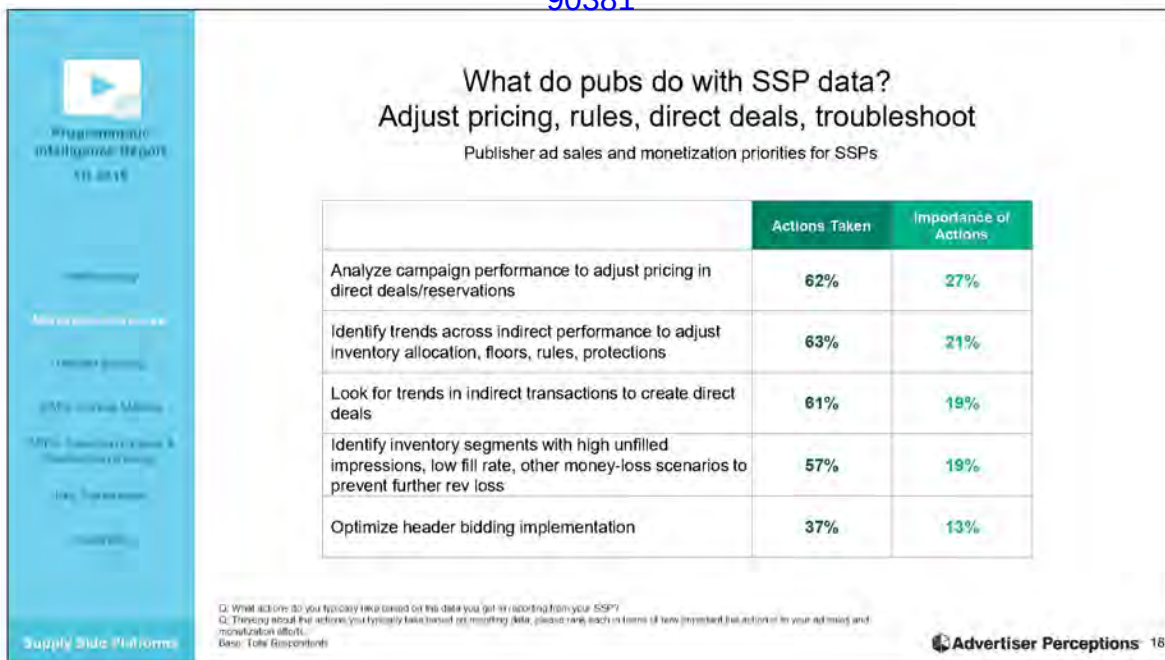


Q75

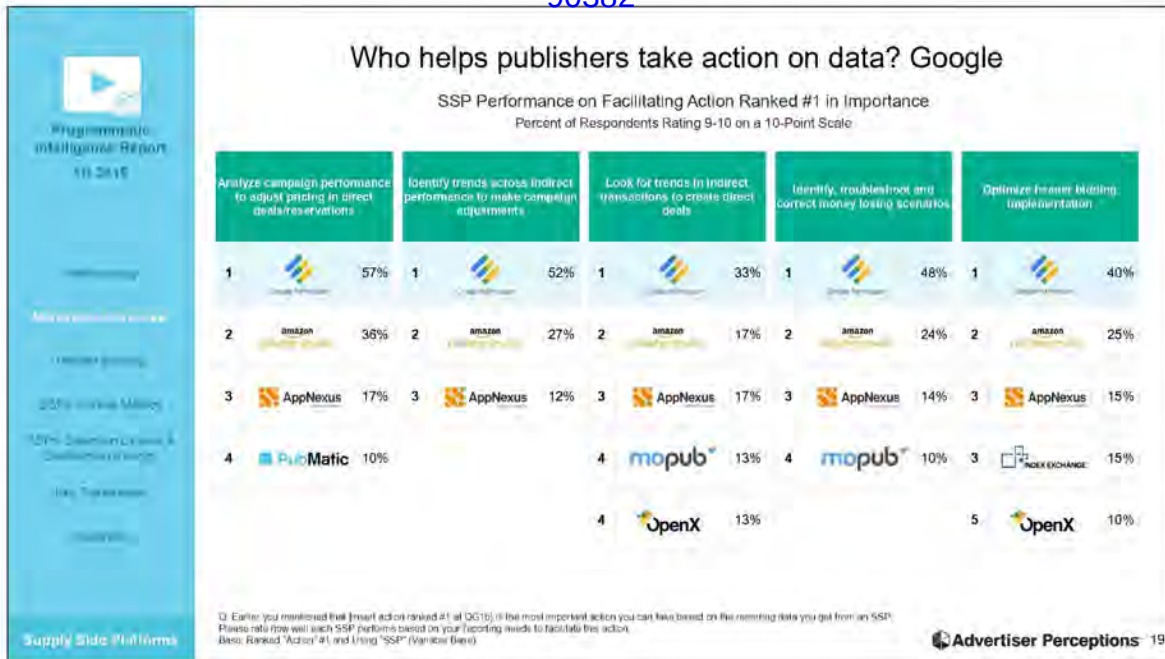


Q50





QG1a, QG1b



QG2

Base sizes: analyze=42; trends across indirect=33; trends across CPM=30; identify=29; header bidding=20

Google=Google Ad Manager, Amazon=A9/Amazon Publisher Services, AppNexus=AppNexus Publisher SSP

Analyze campaign performance to adjust pricing in direct deals/reservations

5 MoPub 7%
6 OpenX 5%
7 Rubicon Project 5%
7 Oath Ad Platforms 0%
7 Index Exchange 0%

Look for trends across indirect performance to make adjustments to inventory allocation, floors, rules, and protections

4 Index Exchange 9%
5 Rubicon Project 9%
6 MoPub 6%
7 OpenX 6%
8 PubMatic 3%
9 Oath Ad Platforms 0%

Look for trends across CPM and advertisers in indirect transactions to create direct deals

6 Index Exchange 7%
7 PubMatic 7%
7 Rubicon Project 7%
7 Oath Ad Platforms 3%

Identify inventory segments with high unfilled impressions, low fill rate, and other money-loss scenarios to troubleshoot and prevent further revenue loss

5 Rubicon Project 7%
6 Index Exchange 3%
6 Oath Ad Platforms 3%
8 OpenX 0%
9 PubMatic 0%

Optimize header bidding set up

6 PubMatic 5%

7 MoPub 0%
8 Rubicon Project 0%
9 Oath Ad Platforms 0%



Programmatic Intelligence Report
Q3 2023

Introduction

Adverse economic outlook

Consumer spending

Global economic outlook

Mobile, Connected TV, and Connected devices

Key Takeaways

Conclusion

Supply Side Platforms

Features SSPs can use to improve brand safety? Few specific suggestions

“

I'd like them to partner up with an established brand safety vendor such as Grapeshot.
- **Manager** (Operations)

Tighter restructuring on spam and fraudulent activity including malware and phishing.
- **C-level** (Sales)

Follow CIMM and IAB new rules to delivery metrics about data and inventory.
- **Director/Supervisor** (Sales)

Have an integrated 3rd party verification partner.
- **Manager** (Operations)

The ability to block malicious advertisements in real time.
- **VP/EVP/SVP** (Sales)

Some way to auto filter bad ads and malicious JavaScript. Tie into IAB brand safety categories.
- **VP/EVP/SVP** (Operations)

Brand safety checks/guarantees that inventory won't be shown on poor sites/being transparent about placements.
- **Manager** (Sales)

Protection against bad ads and malware. Also an overall increase of cyber security.
- **C-level** (Sales)

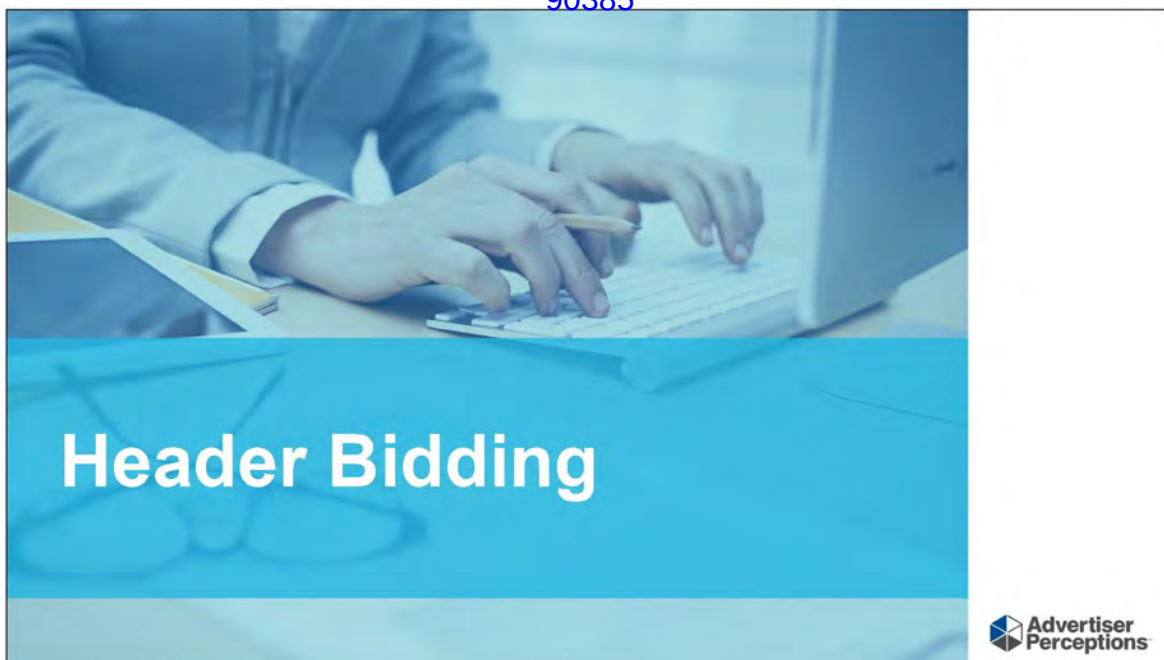
Ensuring no falsified clicks through bot detection at an earlier stage during inventory delivery. Ensuring safe and trustworthy ads are shown across all displays, rather than to have customers or publishers notice on their own - reducing policy violating impressions.
- **Manager** (Sales)

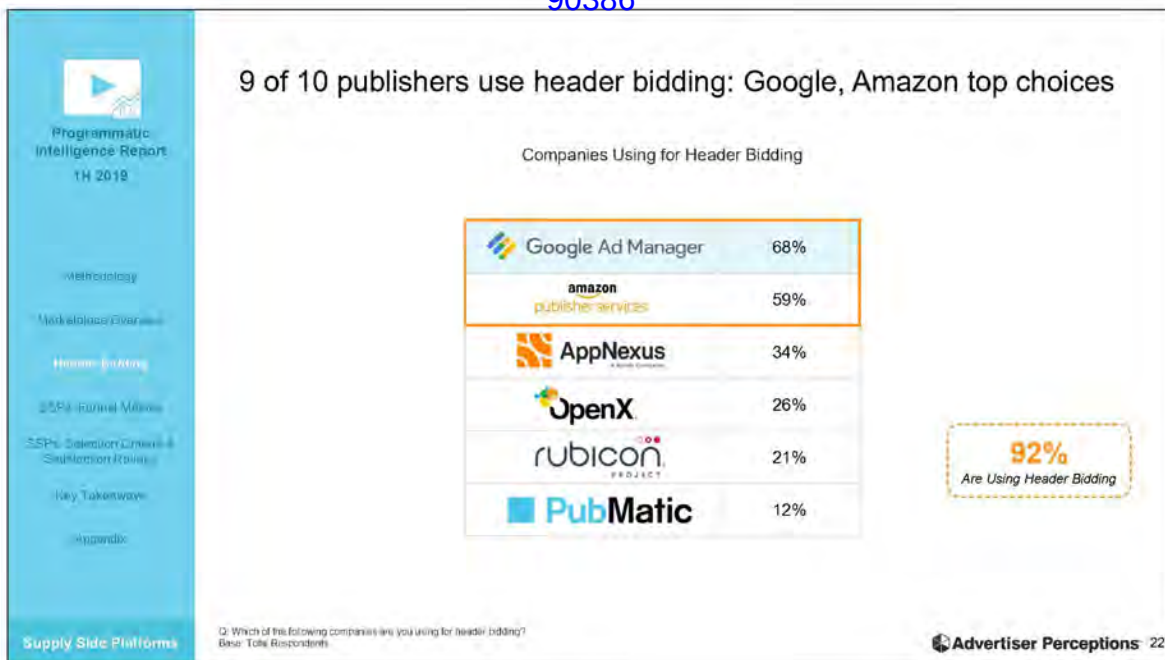
”

Q3 2023 featured in functionality would you like in your SSP to improve brand safety on their platform?
Based on Responses

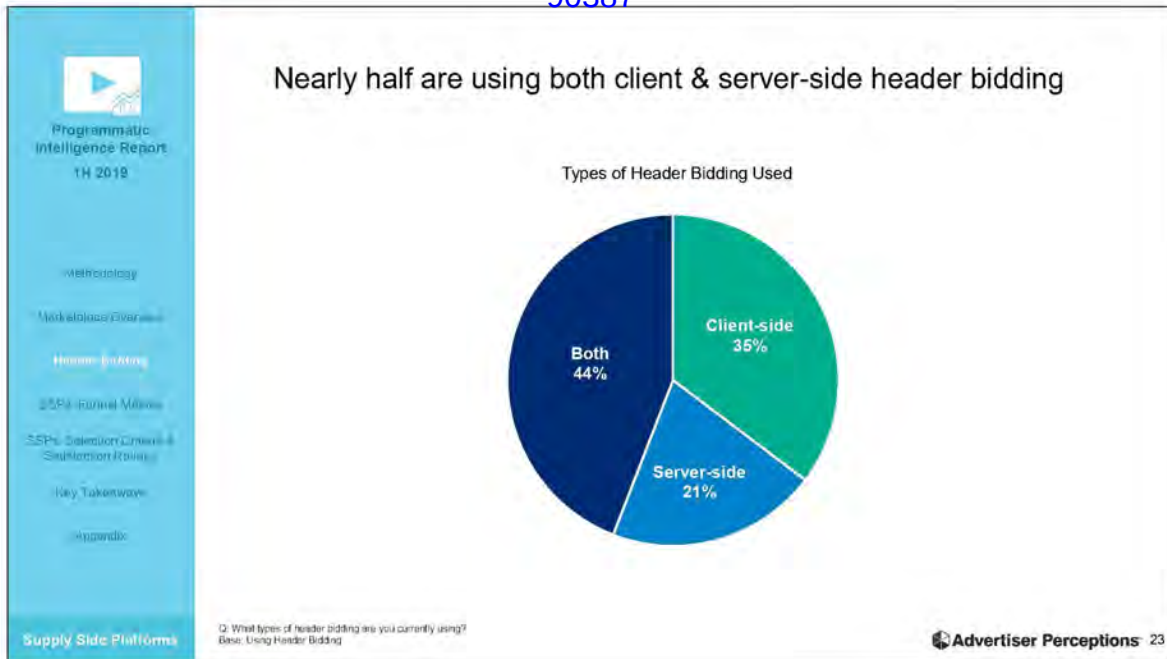
Advertiser Perceptions 20

QG3

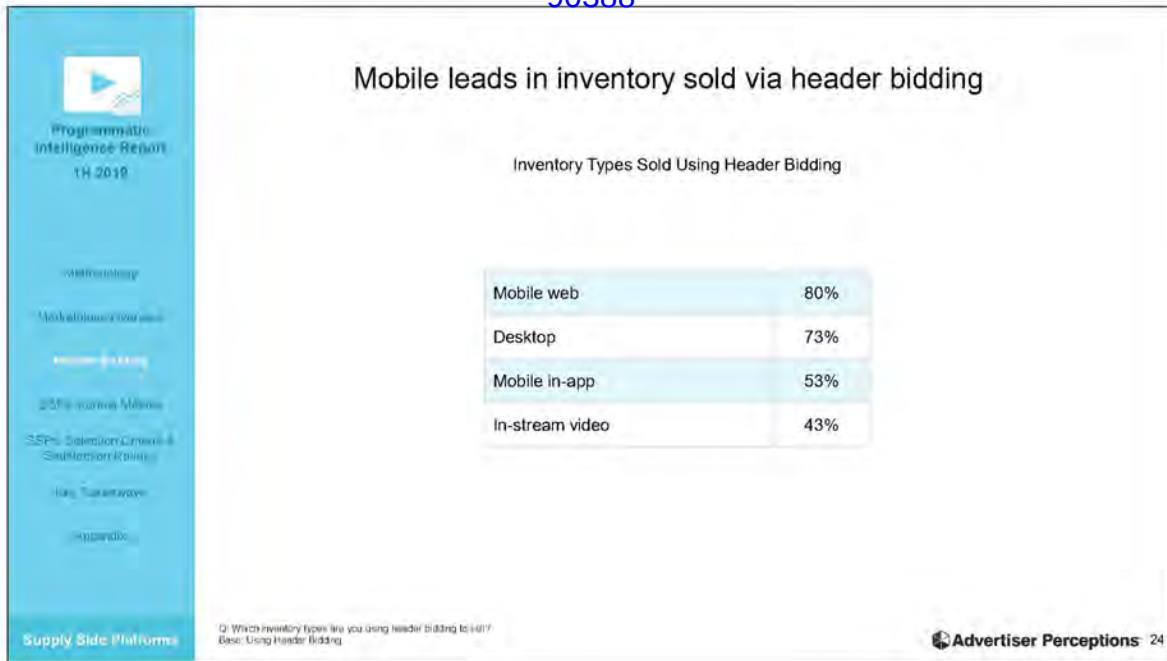




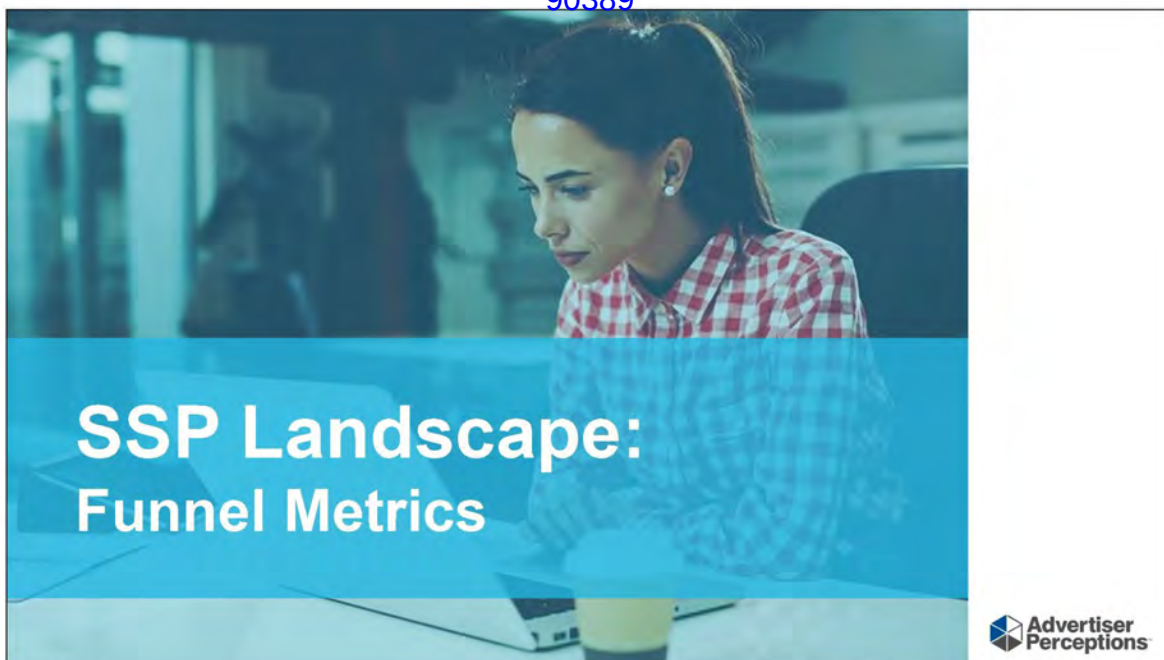
Q46



Q60b



Q60c




Programmatic Intelligence Report
 1H 2019


Webology


Marketplace Overview


Header Bidding


Supply Function Matrix


SSPs: Selection Criteria & Segmentation Review


Key Takeaways

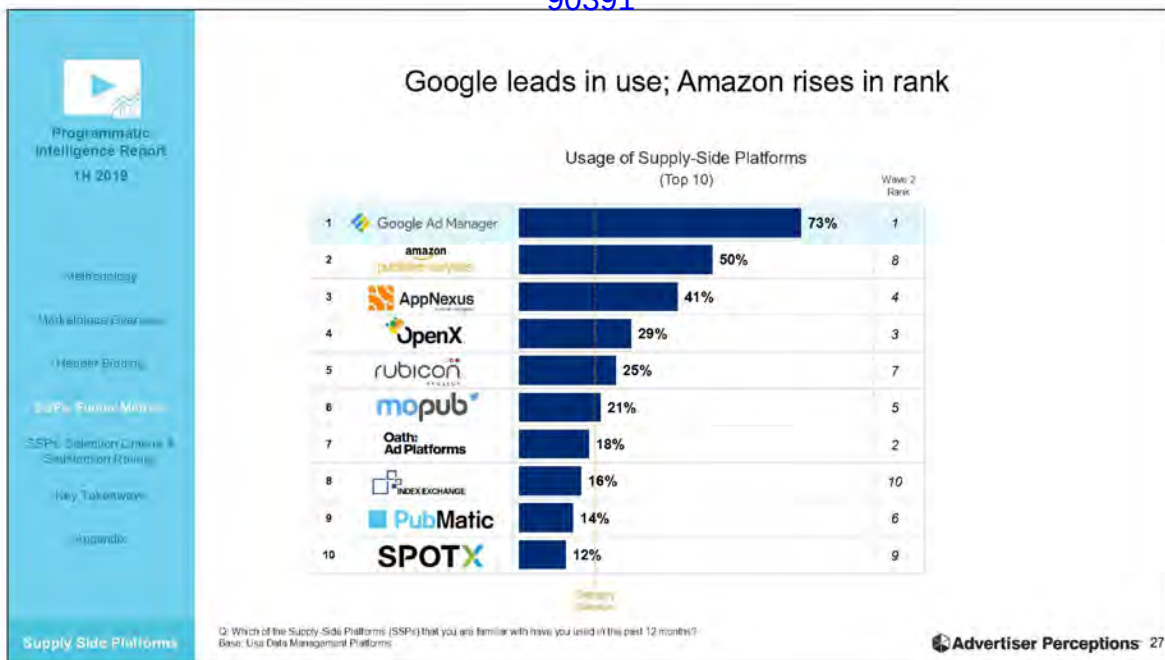

Appendix

Supply Side Platforms

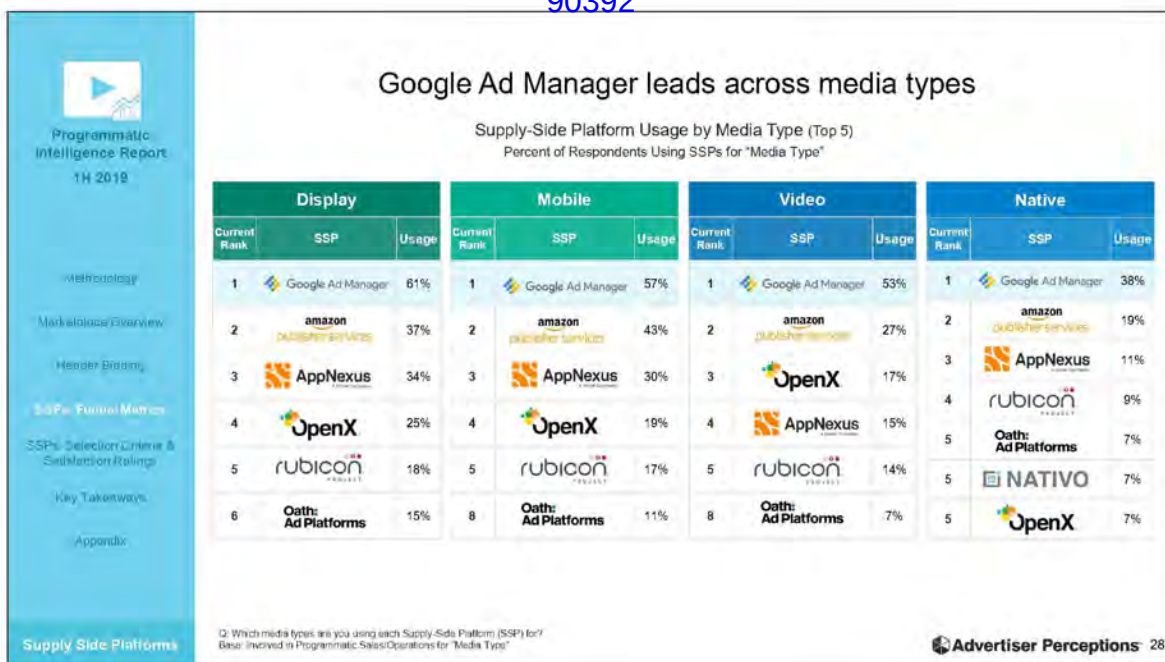
SSPs included in study

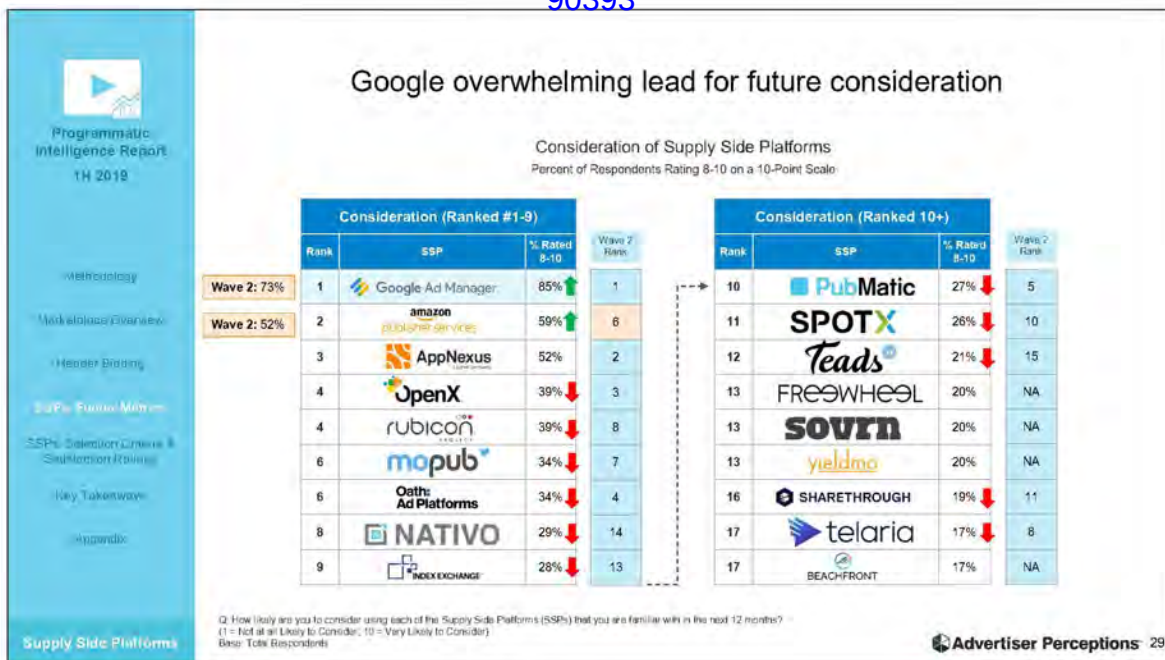




Q115



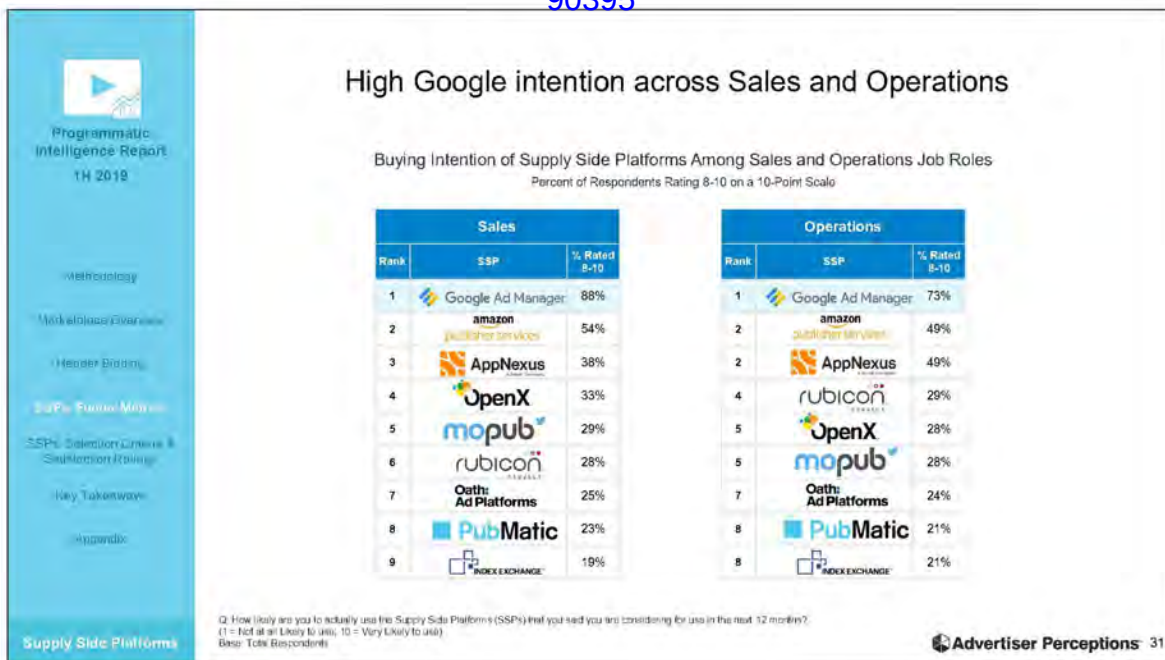
Q118



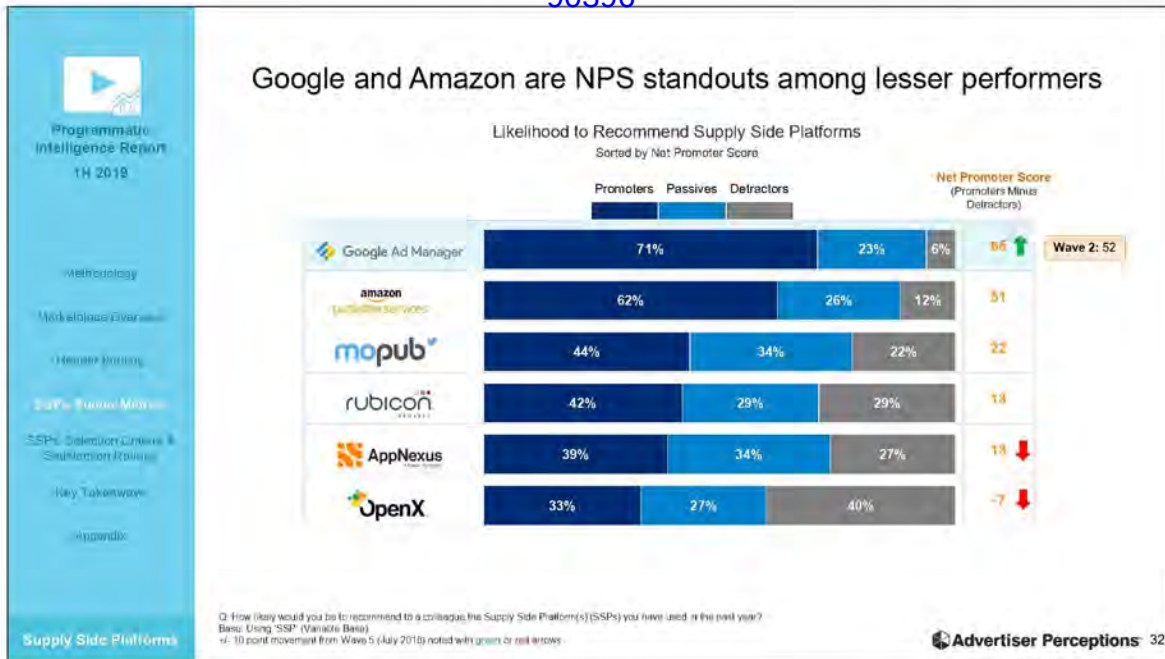
Q120



Q125

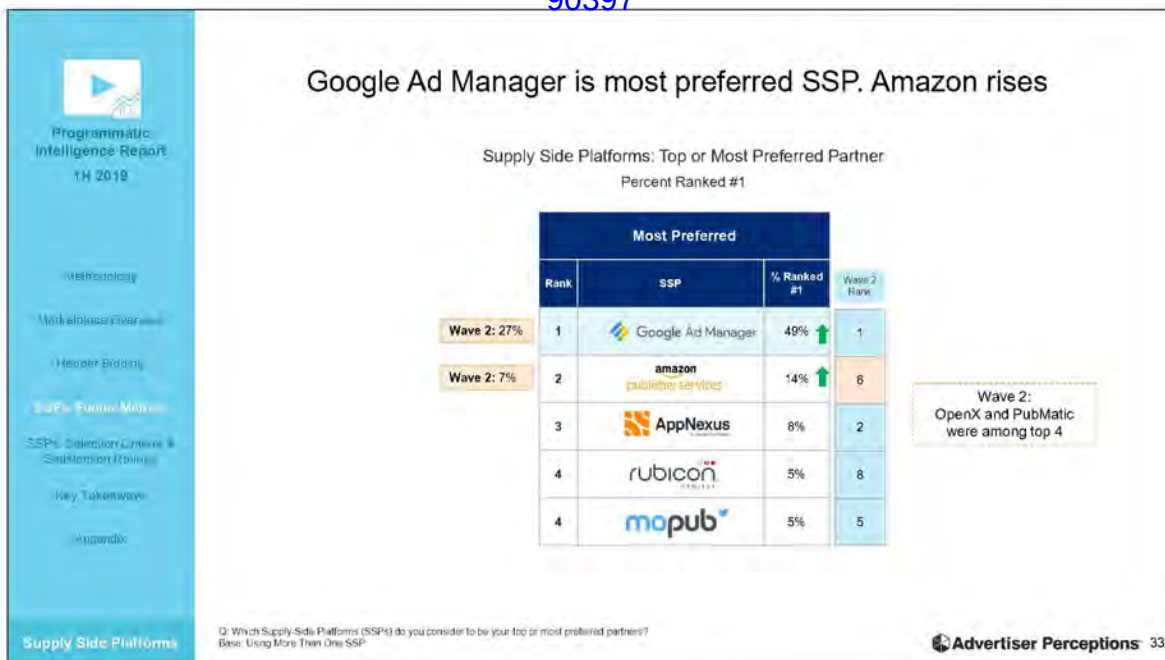


Q125

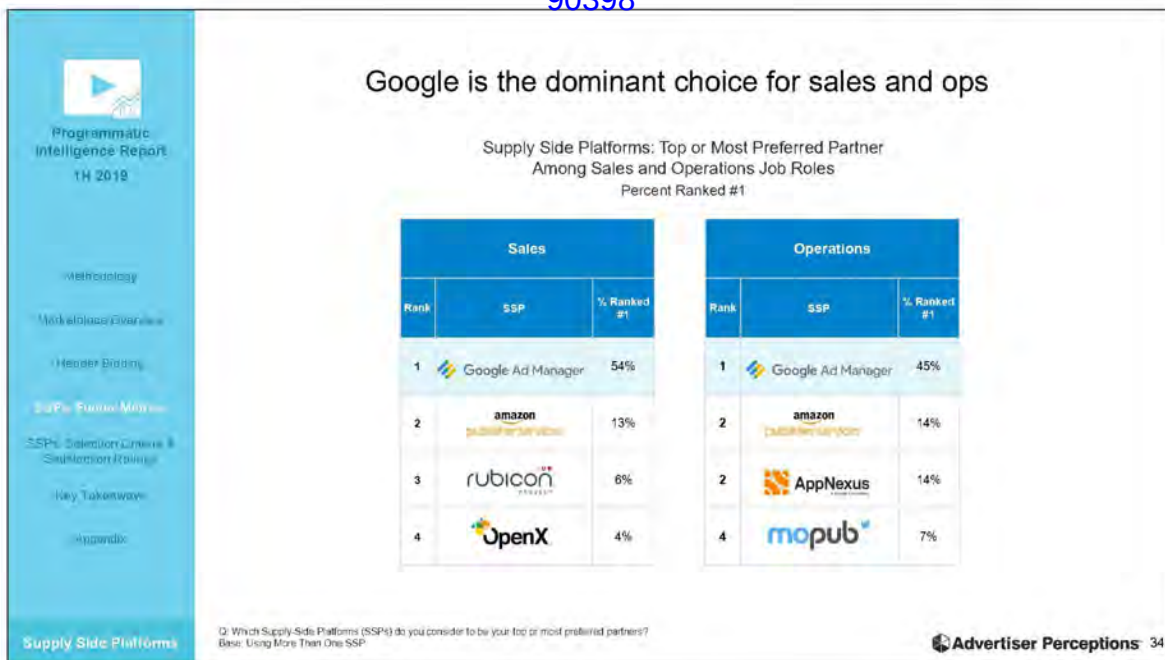


Q130. BASE SIZES:

Google Ad Manager 113 A9/Amazon Publisher Services 77 AppNexus Publisher SSP 64 OpenX 45 Rubicon Project 38 MoPub 32 Oath Ad Platforms 28 Index Exchange 25 PubMatic 22



Q119



Q119



Programmatic
multiscreen the part
of the

Advertiser Perceptions

Supply Side Platforms

Why Google is #1: Performance, Reporting, Ease of Use, Brand Safety

(from 76 comments)

“

*They seem to **perform better** than anyone that we have used, plus they have **years of experience** in this space.*
- **Director/Supervisor** (Operations)

Best visibility/brand safety, best quality inventory.
- **Manager** (Sales)

***An ad server with built-in demand. Creative review and blocking controls. Robust API connections to read/write. Close to real-time, consistent reporting. Innovation** based on the advancements in the digital ecosystem.*
- **VP/EVP/SVP** (Operations)

***They provide exceptional customer service and reporting capabilities** that make it easy for us to identify the right pathways as well as where we need to adjust for success.*
- **Manager** (Sales)

*Communicates our **analytics** across ads well with our team, easy to understand and comprehend for even the newest team members.*
- **Director/Supervisor** (Sales)

*It provides me a platform to **project my advertisements effectively** on video, desktop and mobile platforms.*
- **Manager** (Sales)

***Targeting options:** country, region, browser, OS, ISP, bandwidth, time of day, IP address.*
- **Director/Supervisor** (Operations)

***Dynamic allocation, EBDA, storefront for PMPs/easy access to buyers, ad blocks, and ad serving** tied into it.*
- **Manager** (Operations)

”


Q: What does [SSP NAME] do or offer that makes them your primary choice?
 A: Best. Pretty Google Ad Manager.



Q127







Programmatic Intelligence Report
1H 2019

Marketology

Marketplace Overview

Header Bidding

SSPs: General Market

SSPs: Connected TV & Streaming Video

Key Takeaways

Appendix

Supply Side Platforms

We ask publishers to evaluate SSPs in 4 categories, across 18 criteria

Performance Capabilities Criteria:

1. Analytics providing key metric performances on pricing, campaign effectiveness, new advertisers, etc.
2. Monetization and revenue generation capabilities
3. Auction dynamics (e.g., first price, second price, floor pricing automation & soft floors etc.)
4. Track record of protection against bad ads, bots, fraud

Partnership Criteria:


1. Technology expertise
2. Alignment with publisher goals and needs
3. Proactively share reports, analytics and insights that enable us to make better decisions
4. Is easy to work with

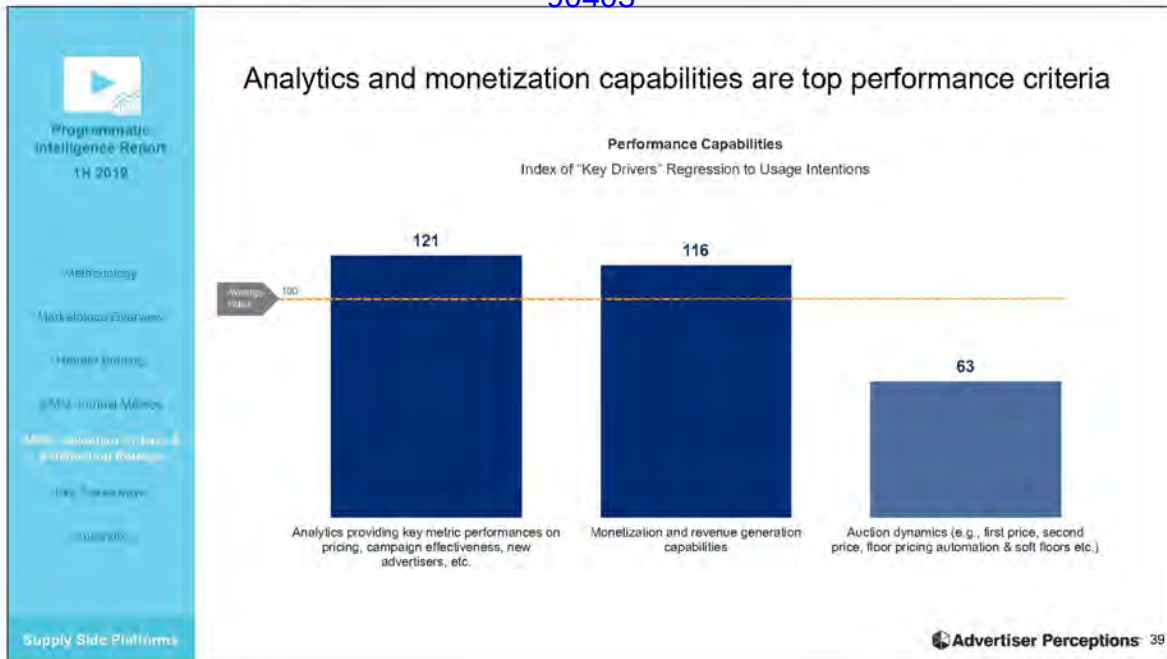
Platform Capabilities Criteria:

1. Ease of use
2. Data available in the platform (impression level auction data, advertiser and bid transparency, etc.)
3. PMP capabilities
4. Visibility into accurate, available inventory
5. Auditing tools for control over ad placement
6. Header bidding capabilities

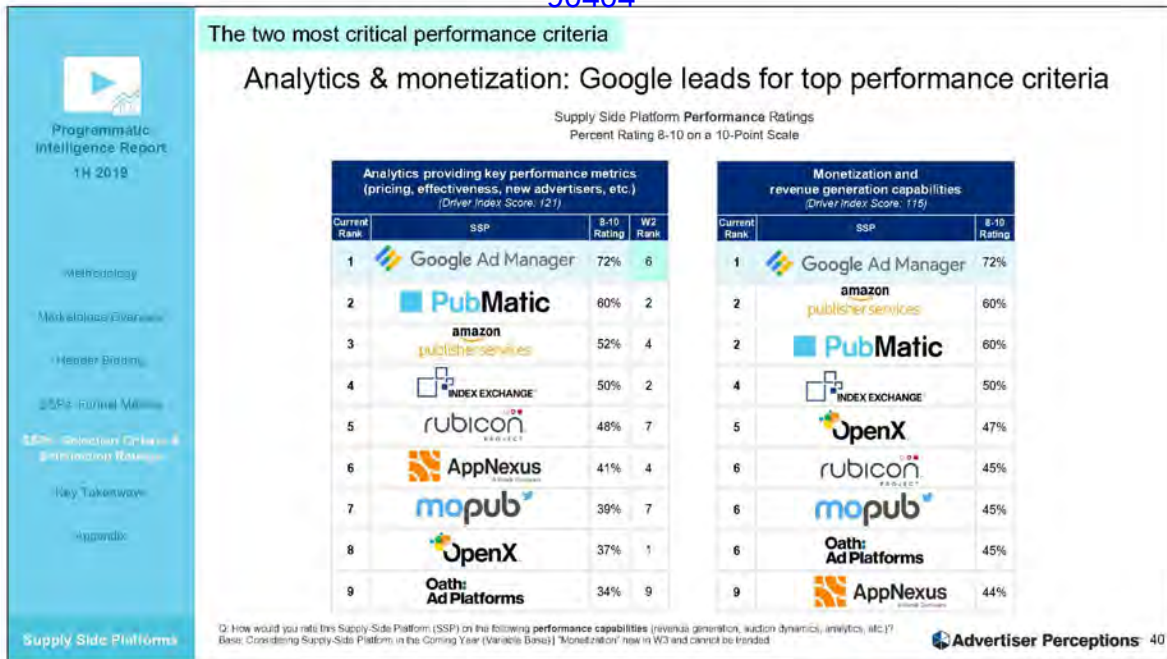
Leadership and Vision Criteria:

1. A market leader
2. Integrity as a company in their behavior in the market and in their dealings with clients
3. Superior technology vision
4. Inspire confidence that our company will succeed in partnership with them

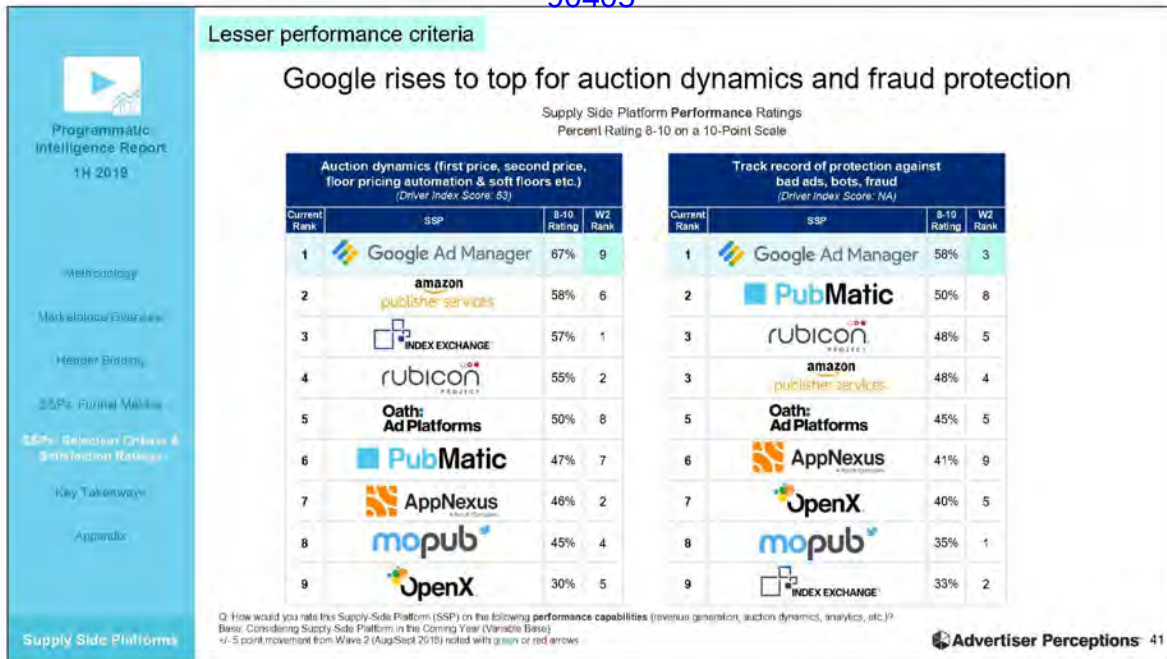




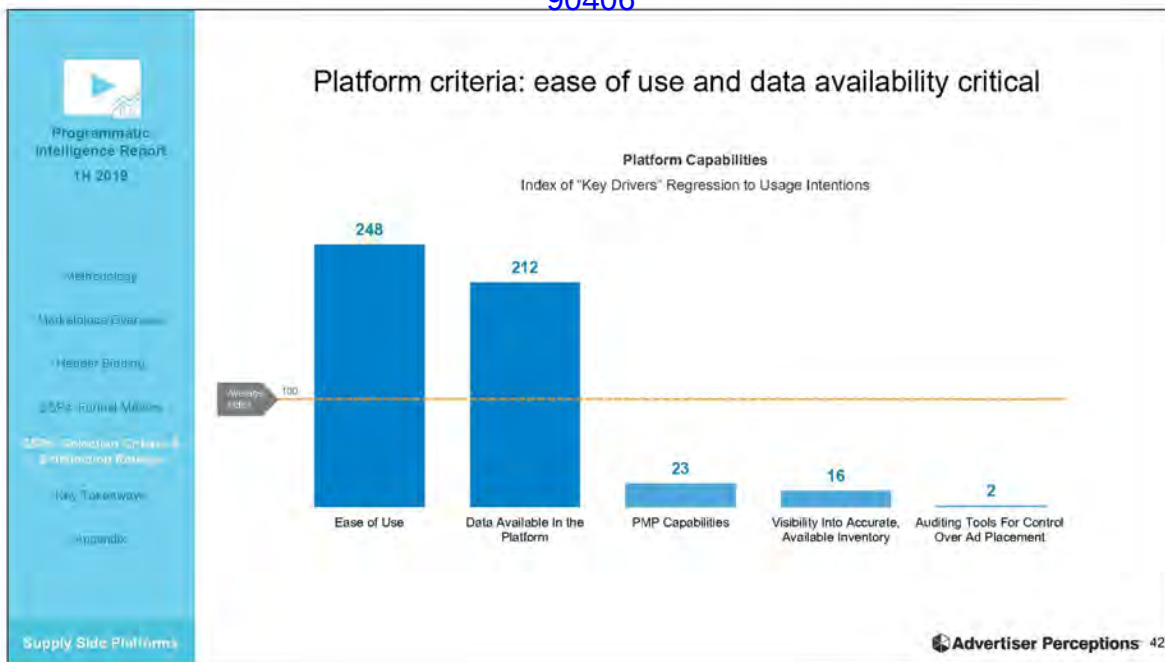
Q140



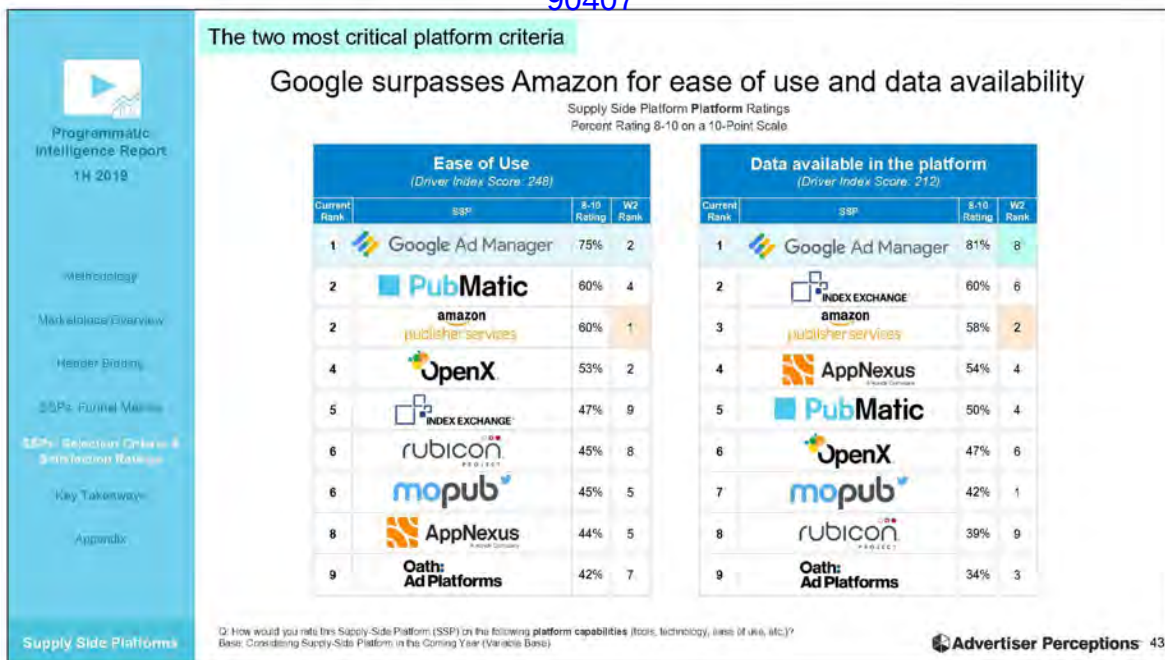
Q140



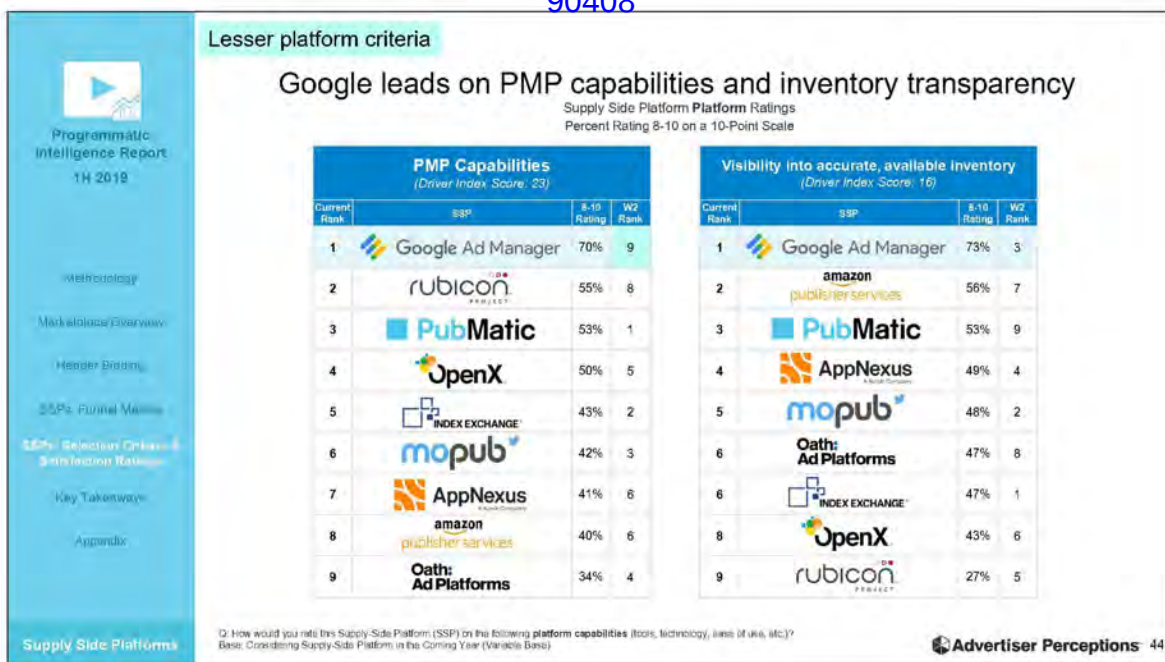
Q140



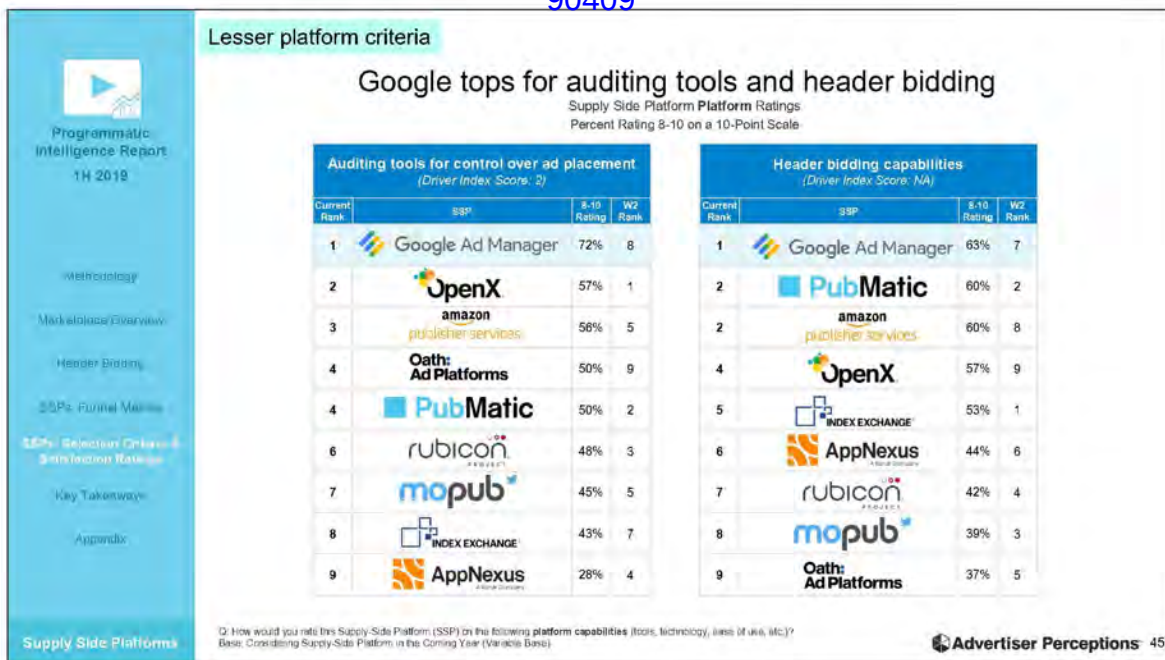
Q135



Q135



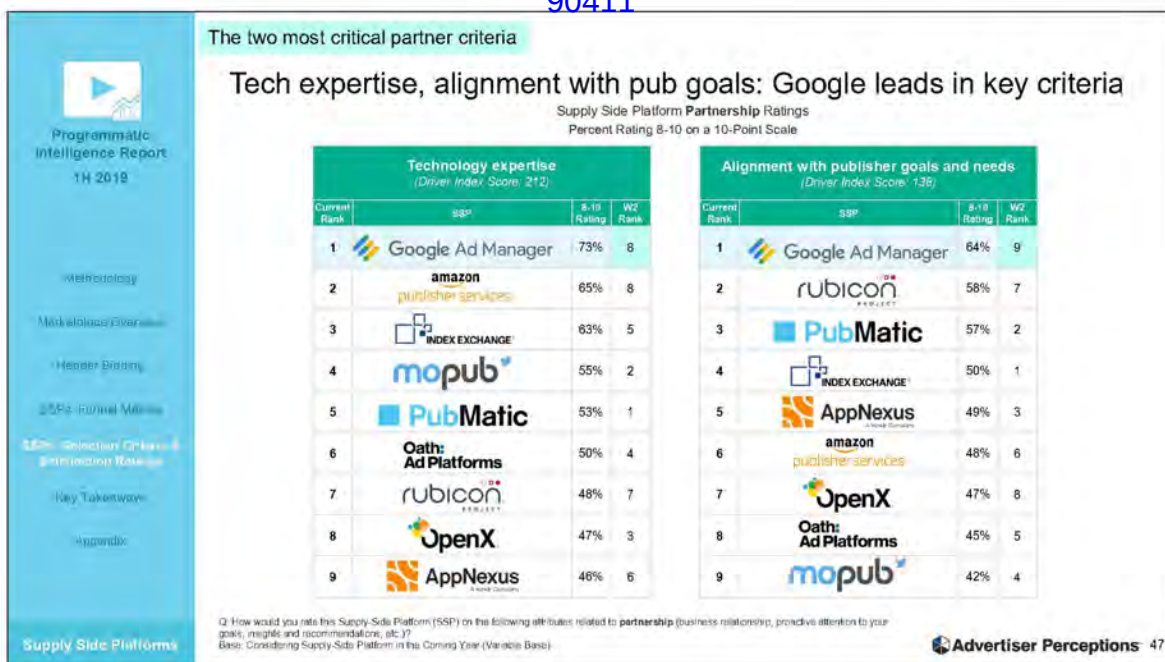
Q135



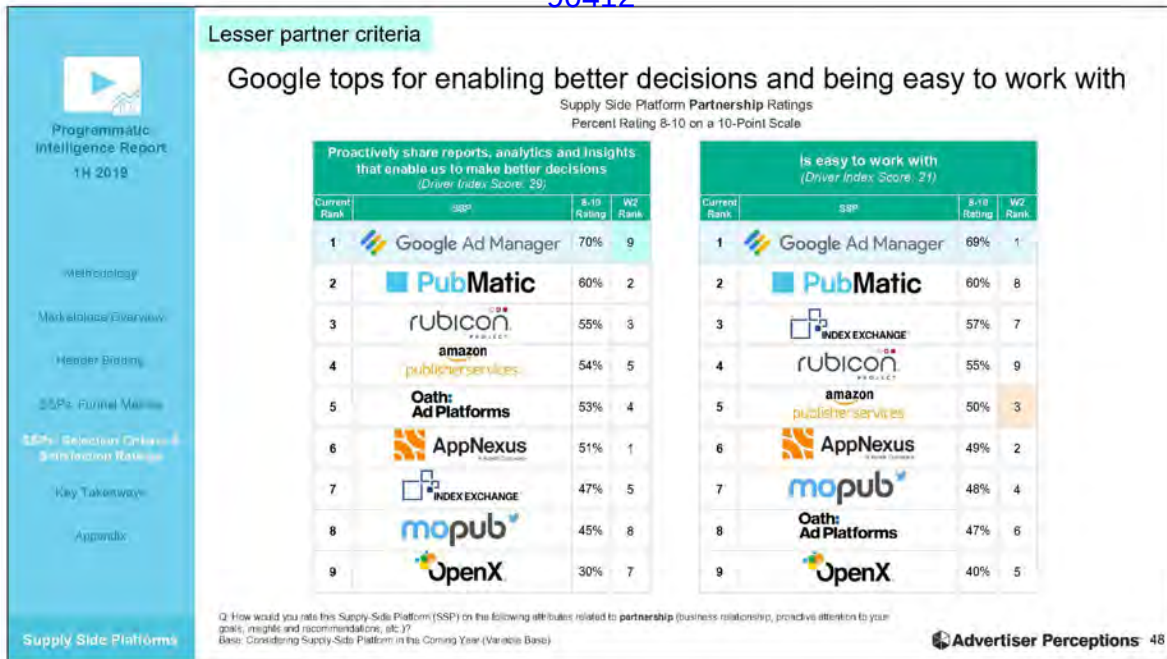
Q135



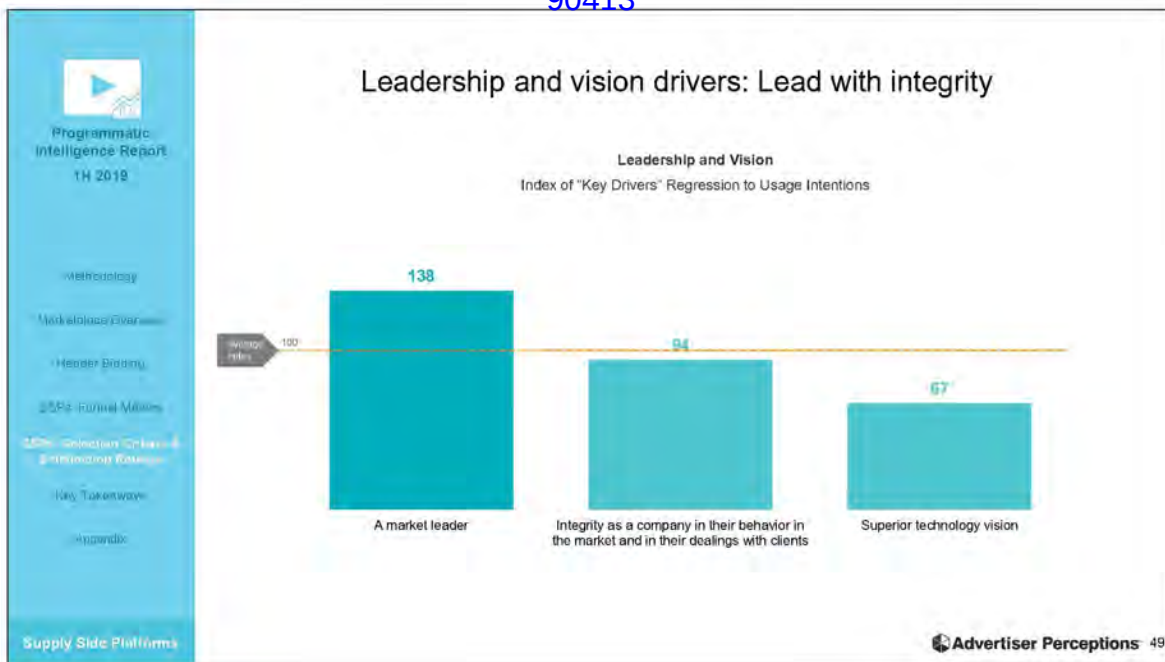
Q145



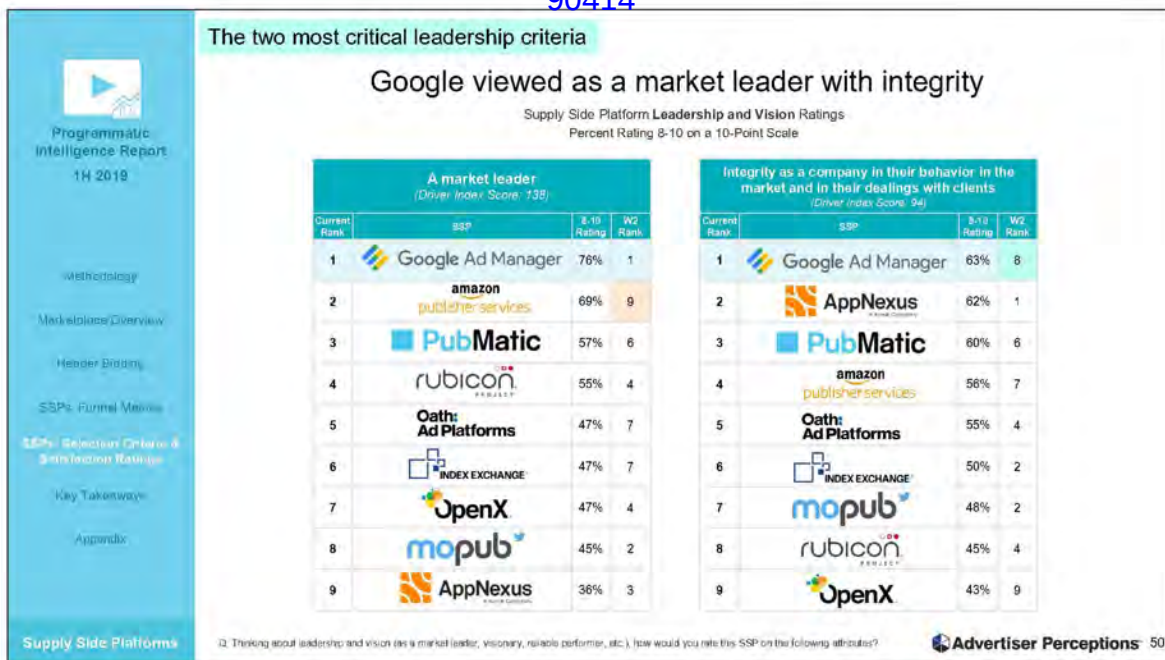
Q145



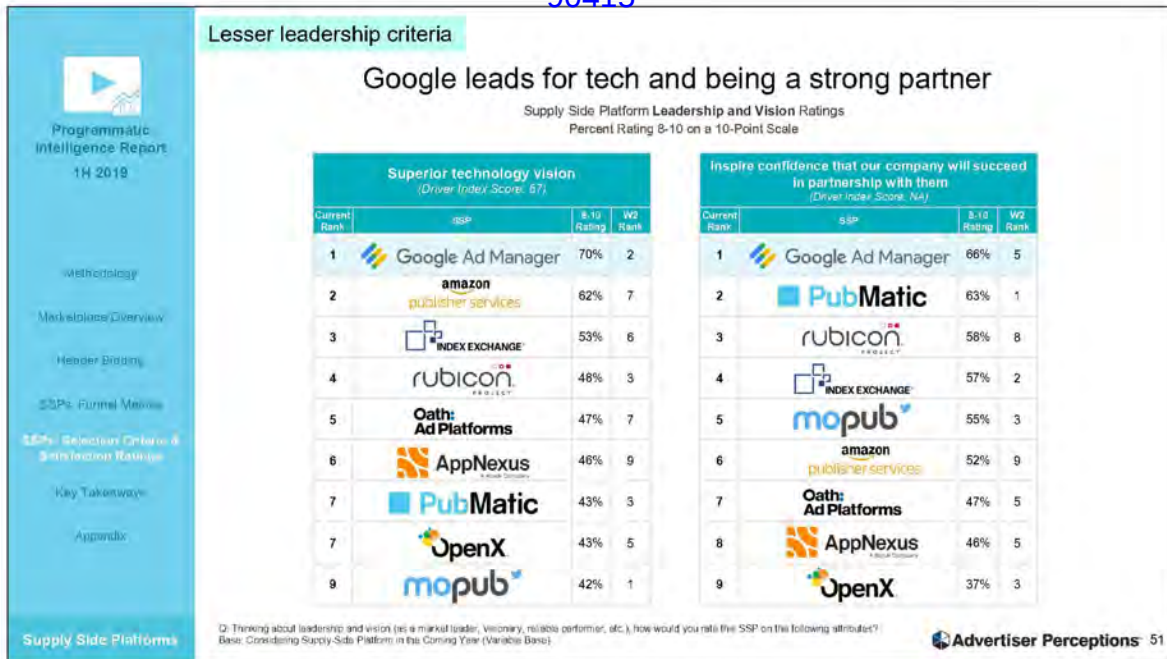
Q145



Q150




Q150



Q150



Q160



Key takeaways


Google's custom questions: publisher ad sales and monetization priorities for SSPs

- What do pubs do with SSP data? Adjust pricing, rules, direct deals, troubleshoot
- Who helps publishers take action on data? Google
- Features SSPs can use to improve brand safety? Few specific suggestions

Funnel metrics

- Google leads across all metrics: usage, consideration, preference, NPS
 - Amazon rising ahead of other SSPs across the board
 - Google overwhelming lead for future consideration
 - Google is the dominant 1st choice for sales and ops

Advertiser Perceptions 53



Programmatic Intelligence Report
Q3 2023

Introduction

Executive Summary

Market Overview

Key Findings

Conclusion

Supply Side Platforms

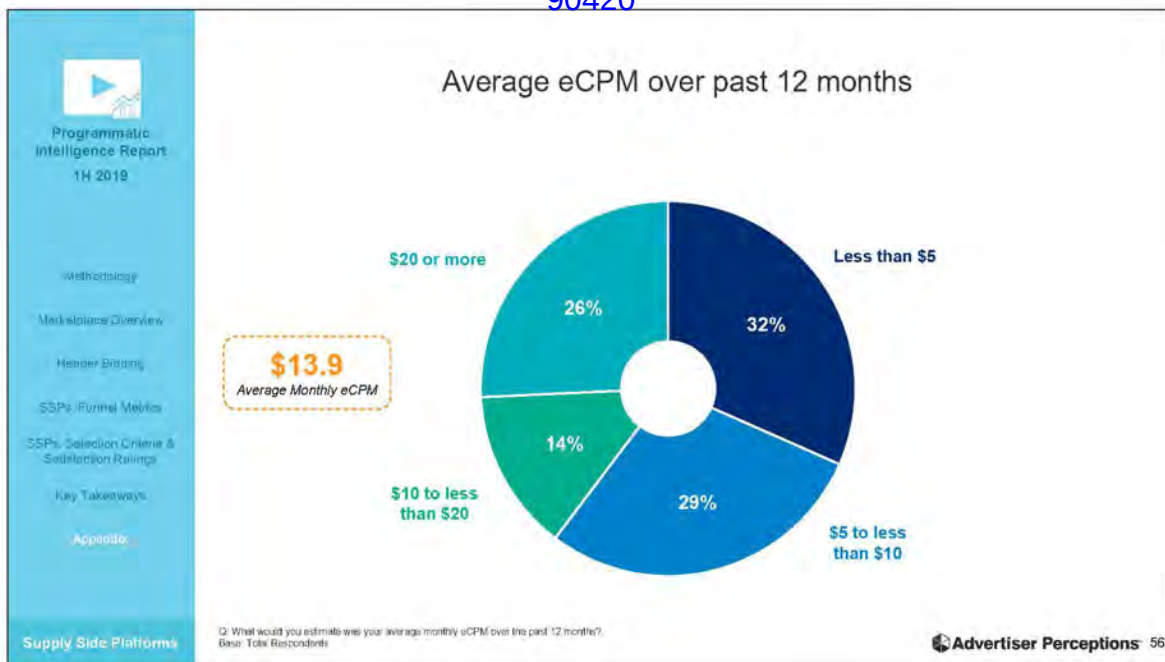
Key takeaways

Selection criteria and satisfaction ratings

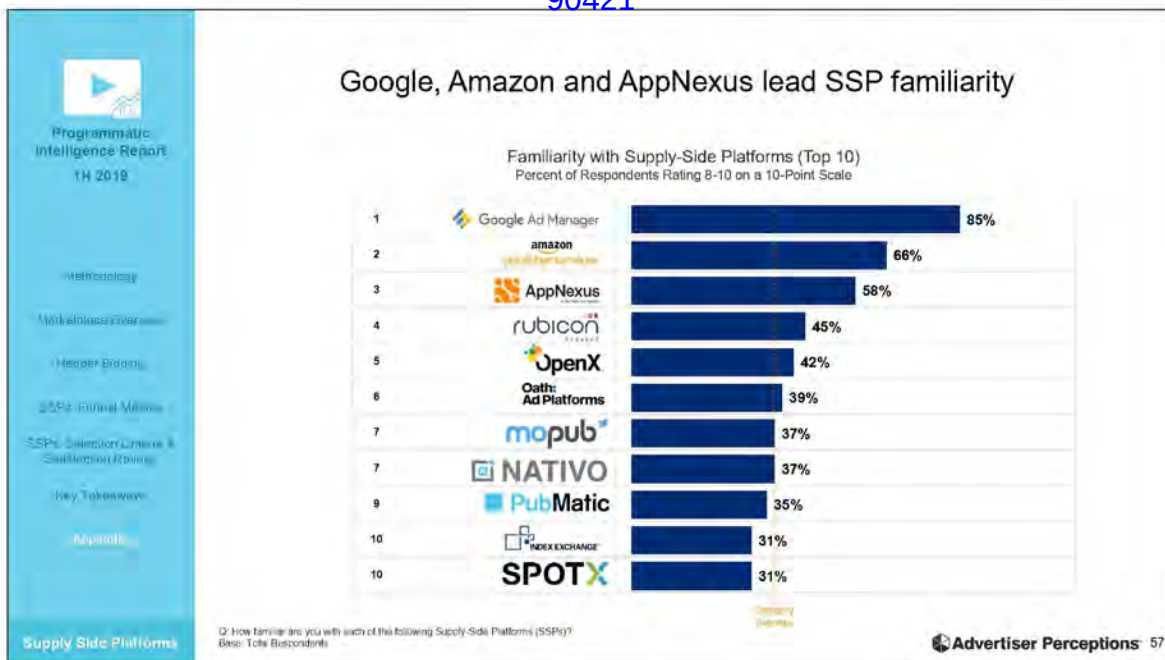
- Analytics and monetization capabilities are top performance criteria
 - Google leads for top performance criteria
- Platform criteria: ease of use and data availability critical
 - Google moves ahead of Amazon for ease of use and data availability
- Critical SSP partner qualities: tech expertise and alignment with publisher goals
 - Tech expertise, alignment with pub goals: Google leads in key criteria
- Leadership and vision drivers: Google viewed as a market leader with integrity
- Google, Amazon and AppNexus tops for sales coverage

Advertiser Perceptions 54





Q211 - NEW IN W3



Q110

Amazon Publisher Services as preferred SSP:
Service, reporting, ease of use, scale
(from 21 comments)

“

Reports generated are more efficient and clarity regarding the hike or drop in prices or inventory lists. It also has a **good reporting UI**.
- **Manager** (Operations)

Excellence in service, leadership and customer service quality. Intense dedication to our company as clients and partners.
- **C-level** (Sales)

Provides ease of use and correctly displays inventory preferences.
- **Director/Supervisor** (Sales)

Easy user-friendly interface.
- **VP/EVP/SVP** (Sales)

They provide excellent customer service and smooth implementation that has lasted the duration of our time utilizing them.
- **Manager** (Operations)

Transparent Ad Marketplace is cloud-based, we now use it to **easily onboard and scale other demand partners** without having to bother our development team.
- **Director/Supervisor** (Operations)

They are very efficient and they offer a vast array of functions. Also they are very scalable and customizable.
- **C-level** (Operations)

Significant data insights in reporting.
- **Director/Supervisor** (Operations)


”

Supply Side Platforms

Q: What does [SSP NAME] do to offer that makes them your primary choice?
A: We prefer Amazon Publisher Services.

Advertiser Perceptions 58

Q127



Programmatic Intelligence Report
1H 2019

- Advertising
- Media/Advertiser/Agency
- Consumer Insights
- SSPs/Programmatic
- SSPs/Advertisers/Agencies & Campaigns/Reporting
- Other Topics/Insights

Supply Side Platforms

“

AppNexus Publisher as Preferred SSP:
Pricing, Service, Brand Safety, Ease of Use
(from 13 comments)

Low fees and integration to publishers.
- *Manager* (Operations)

Convenience and cost.
- *Manager* (Operations)

Ease of setup and use.
- *Manager* (Operations)

It offers safety and knowledge on uplifting other platforms.
- *Director/Supervisor* (Operations)

Display and video expertise.
- *Director/Supervisor* (Operations)

Inventory management.
- *Director/Supervisor* (Operations)

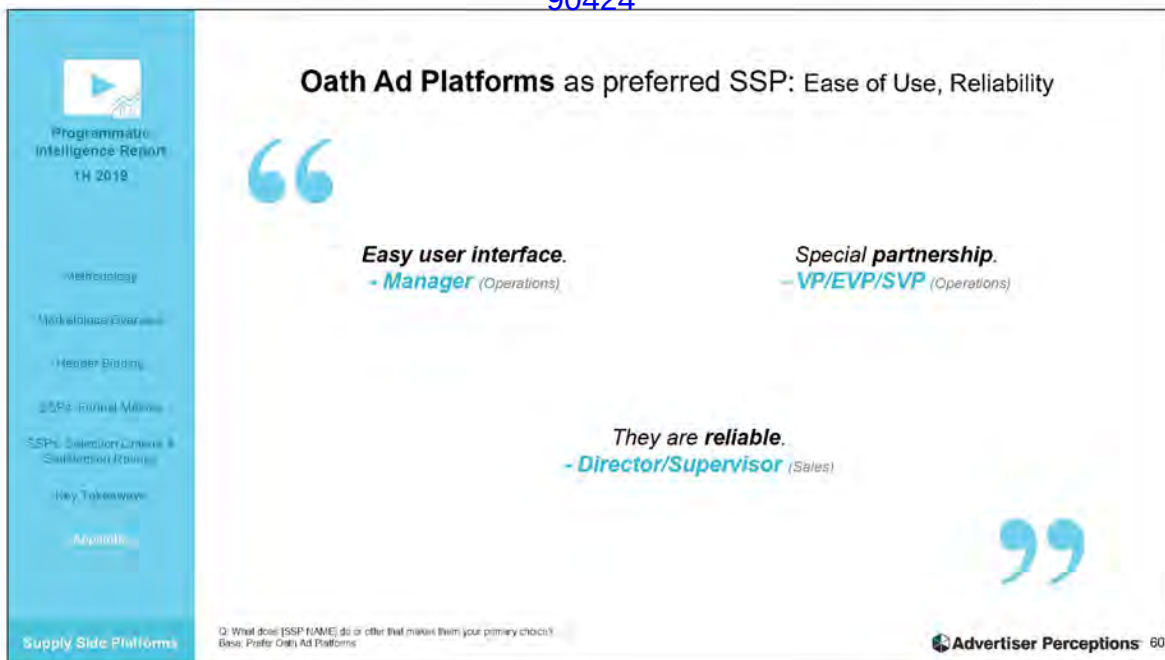
Stronger partnership, transparency, reliability.
- *Manager* (Operations)

”

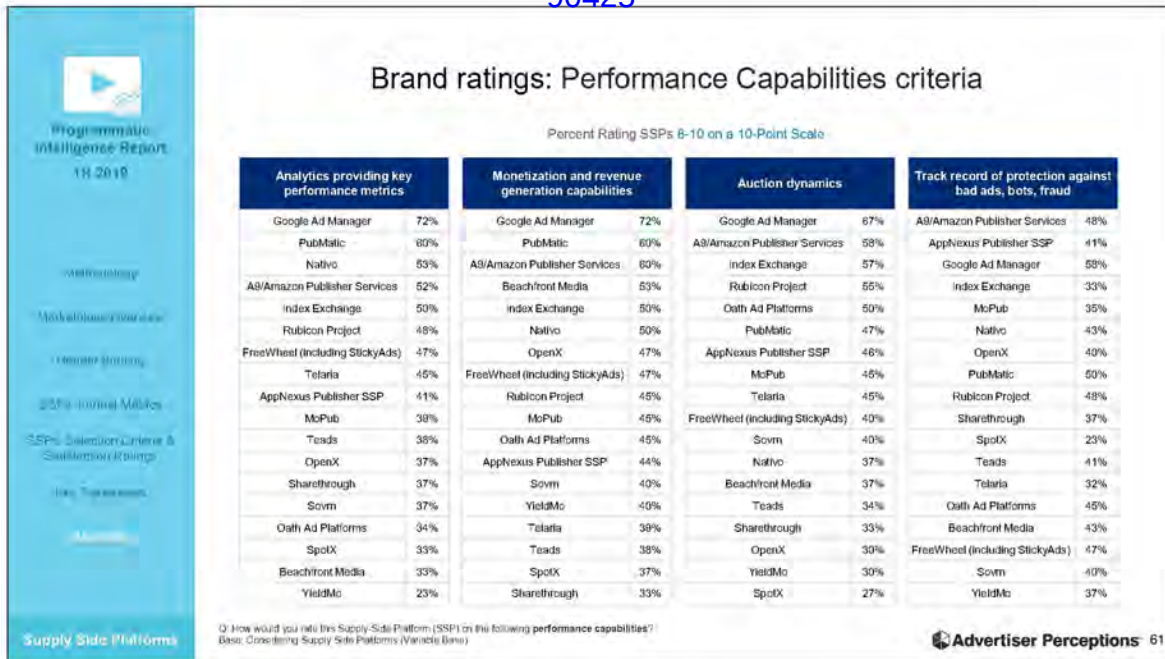
Q: What does [SSP NAME] do or offer that makes them your primary choice?
Base: Profit AppRise



Q127



Q127



Q140

90420

Programmatic
Intelligence Report
1H 2019

Advertiser Perceptions

Marketplace Overview

Advertiser Perceptions

25% Advertiser Metrics

25% Advertiser Metrics &
Satisfaction Ratings

How To Use Report

Advertiser Perceptions

Supply Side Platforms

Brand ratings: Platform Capabilities criteria

Percent Rating SSPs 8-10 on a 10-Point Scale

Ease of use	Data available in the platform	PMP capabilities	Visibility into accurate, available inventory	Auditing tools for control over ad placement	Header bidding capabilities
Google Ad Manager 75%	Google Ad Manager 81%	Google Ad Manager 70%	Google Ad Manager 73%	Google Ad Manager 72%	Google Ad Manager 63%
PubMatic 60%	Index Exchange 60%	FreeWheel (including StickyAds) 60%	A9/Amazon Publisher Services 56%	OpenX 57%	PubMatic 60%
A9/Amazon Publisher Services 60%	A9/Amazon Publisher Services 58%	Rubicon Project 55%	PubMatic 53%	A9/Amazon Publisher Services 56%	A9/Amazon Publisher Services 60%
OpenX 53%	AppNexus Publisher SSP 54%	Native 53%	Native 50%	PubMatic 50%	OpenX 57%
Index Exchange 47%	PubMatic 50%	PubMatic 53%	AppNexus Publisher SSP 48%	Oath Ad Platforms 50%	Beachfront Media 57%
Native 47%	OpenX 47%	OpenX 50%	MoPub 48%	Rubicon Project 48%	Index Exchange 53%
Beachfront Media 47%	Beachfront Media 47%	Index Exchange 43%	Oath Ad Platforms 47%	Native 47%	Native 53%
Rubicon Project 45%	Native 43%	MoPub 42%	Index Exchange 47%	Beachfront Media 47%	Sharethrough 53%
MoPub 45%	FreeWheel (including StickyAds) 43%	AppNexus Publisher SSP 41%	OpenX 43%	MoPub 45%	Telaria 52%
AppNexus Publisher SSP 44%	MoPub 42%	A9/Amazon Publisher Services 40%	Sharethrough 43%	Index Exchange 43%	Sovm 47%
Oath Ad Platforms 42%	Rubicon Project 39%	Teads 38%	Beachfront Media 43%	Sovm 43%	AppNexus Publisher SSP 44%
FreeWheel (including StickyAds) 37%	Sovm 37%	Beachfront Media 37%	Telaria 42%	Telaria 42%	Rubicon Project 42%
Sovm 37%	Teads 34%	Oath Ad Platforms 34%	Teads 41%	Teads 41%	Teads 41%
YieldMo 37%	Oath Ad Platforms 34%	Sovm 33%	FreeWheel (including StickyAds) 37%	Sharethrough 40%	MoPub 39%
Sharethrough 33%	Sharethrough 33%	YieldMo 33%	Sovm 37%	SpotX 37%	Oath Ad Platforms 37%
Teads 31%	YieldMo 33%	Telaria 32%	YieldMo 30%	FreeWheel (including StickyAds) 37%	FreeWheel (including StickyAds) 33%
Telaria 26%	SpotX 27%	Sharethrough 27%	Rubicon Project 27%	YieldMo 33%	YieldMo 33%
SpotX 23%	Telaria 26%	SpotX 23%	SpotX 23%	AppNexus Publisher SSP 28%	SpotX 30%

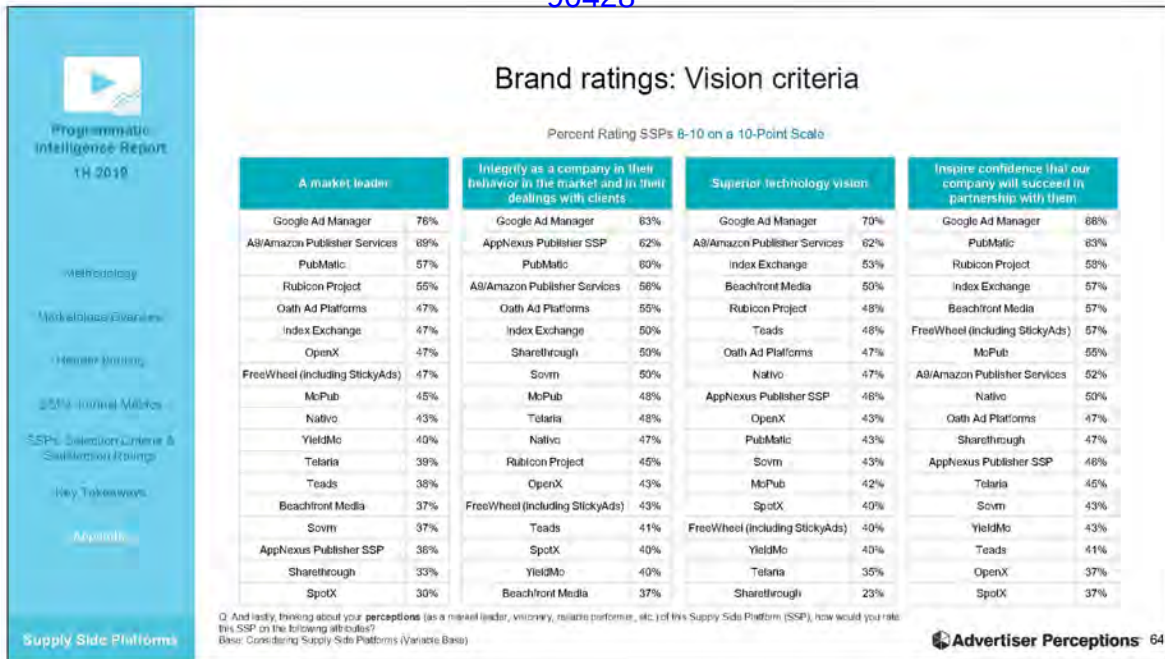
Q: How would you rate this Supply-Side Platform (SSP) on the following platform capabilities?
Base: Considering Supply Side Platforms (Variable Base)

Advertiser Perceptions 62

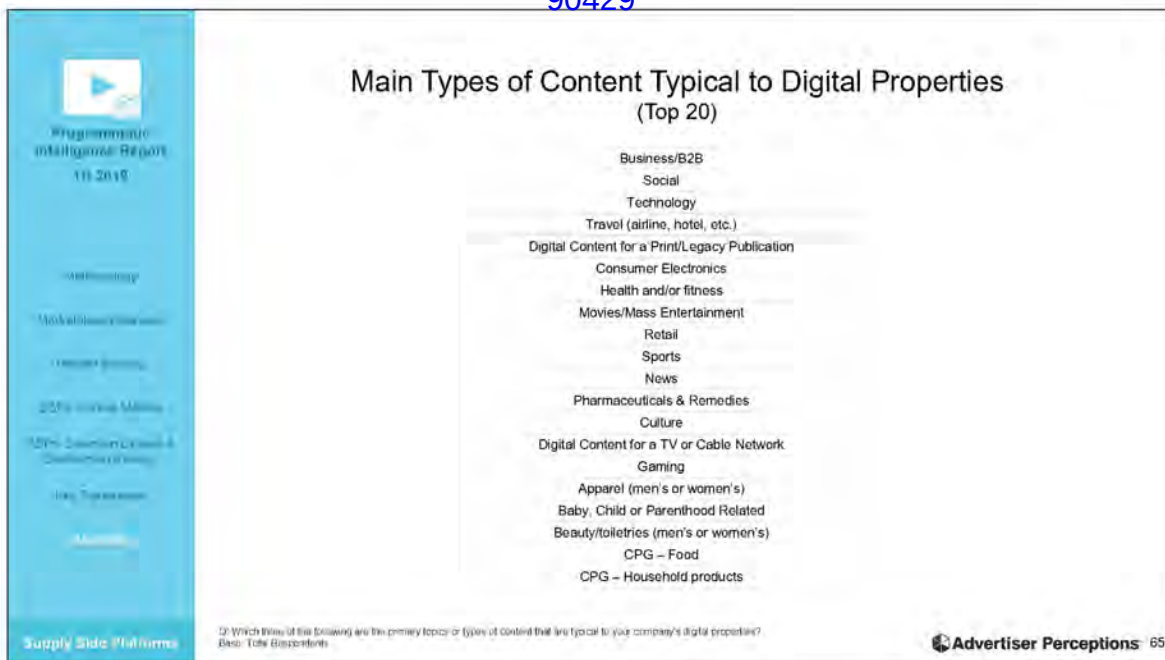
Q135



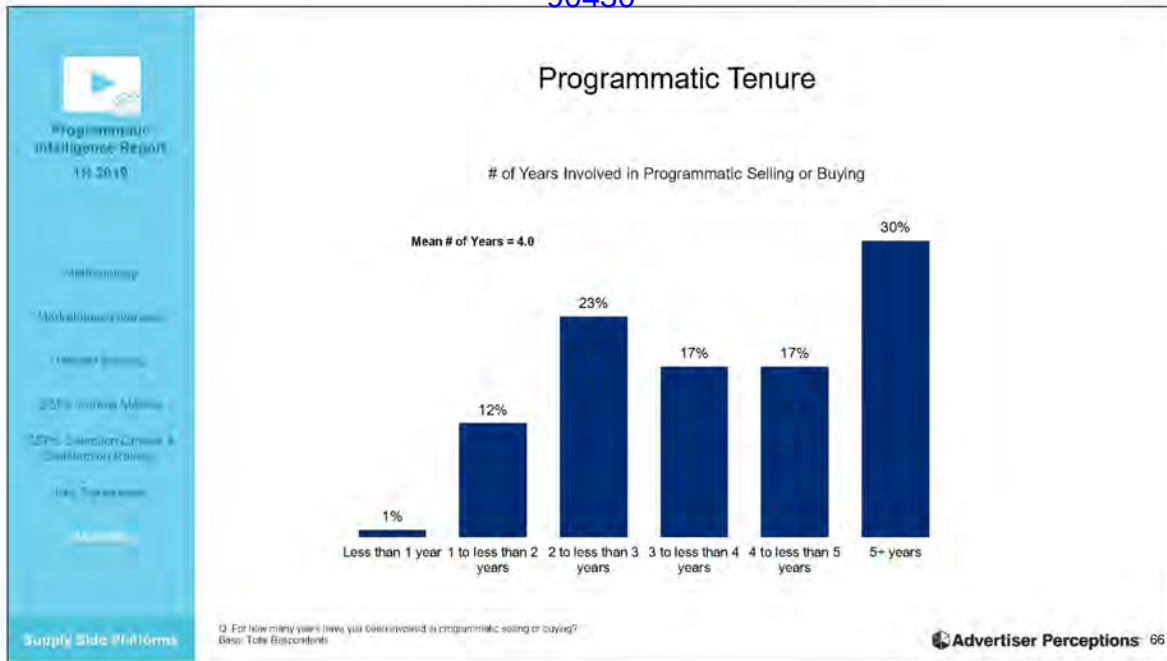
Q145



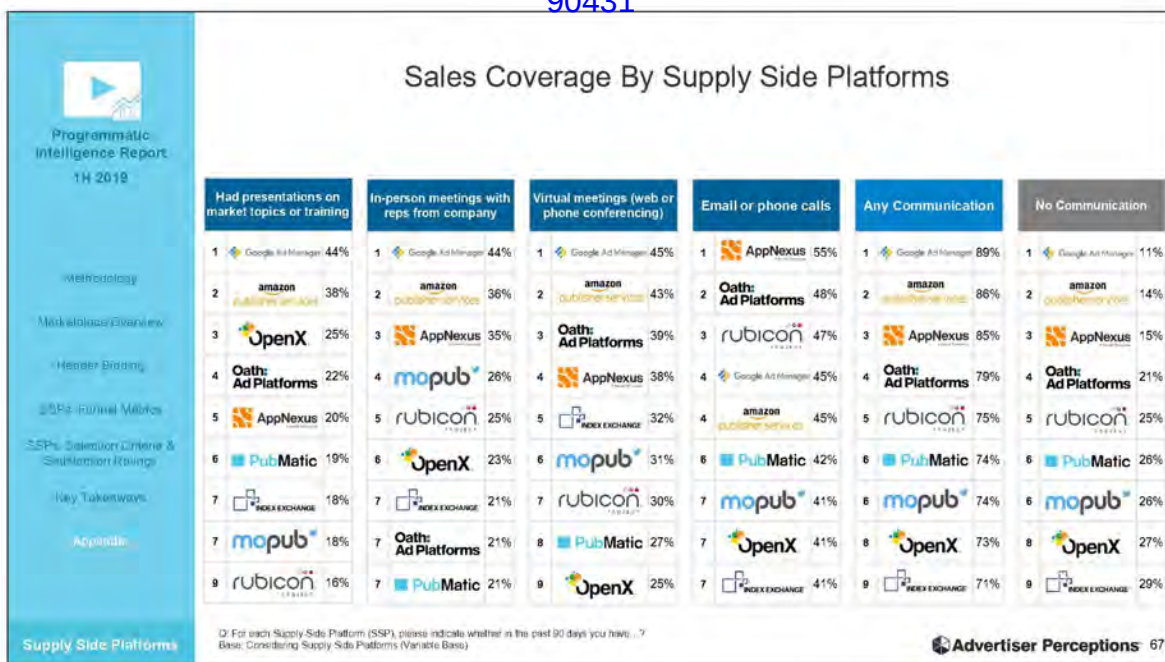
Q150



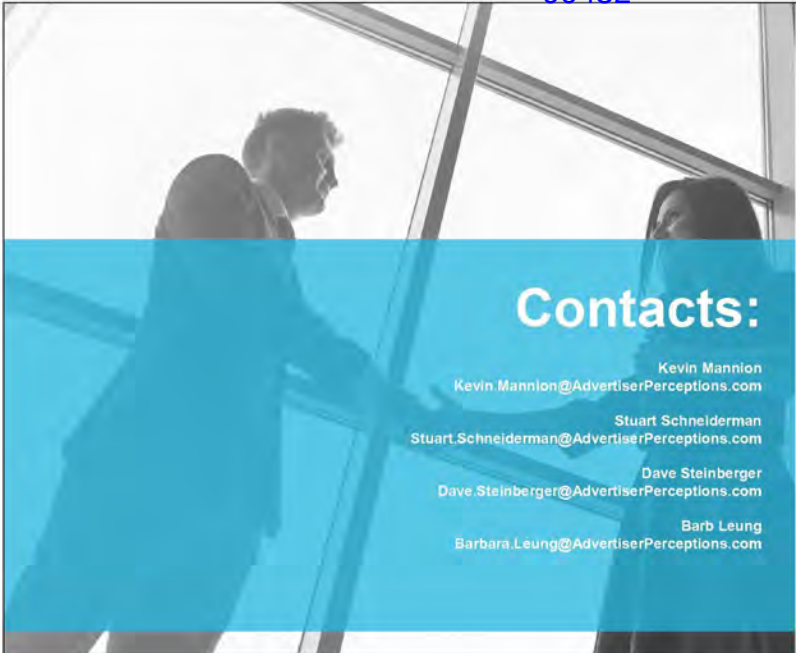
Q220b - Primary Involvement



Q245



Q160




Contacts:

Kevin Mannion
Kevin.Mannion@AdvertiserPerceptions.com

Stuart Schneiderman
Stuart.Schneiderman@AdvertiserPerceptions.com

Dave Steinberger
Dave.Steinberger@AdvertiserPerceptions.com

Barb Leung
Barbara.Leung@AdvertiserPerceptions.com



Advertiser Perceptions™

What Advertisers Think™

The More You Know
The Stronger Your Brand
The More You'll Sell™

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native

Produced in Native